

*American*

# FORESTS

APRIL 1951

50 CENTS



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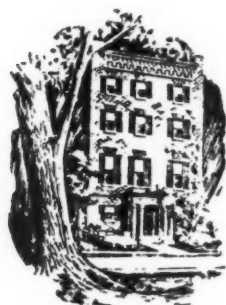
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APRIL, 1951  
VOLUME 57  
NUMBER 4



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The American Forestry Association, publishers of *American Forests*, is a national organization—independent and non-political in character—for the advancement of intelligent management and use of forests and related resources of soil, water, wildlife and outdoor recreation. Its purpose is to create an enlightened public appreciation of these resources and the part they play in the social and economic life of the nation. Created in 1875, it is the oldest national forest conservation organization in America.

# American FORESTS

PUBLISHED BY THE AMERICAN FORESTRY ASSOCIATION

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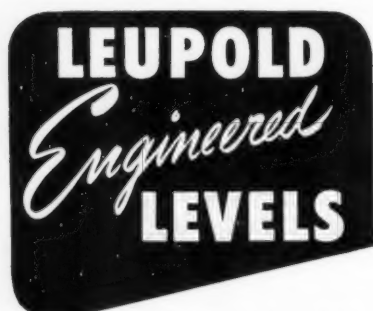
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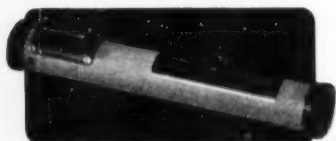
From distant and restless Taiwan—more popularly known to most Americans as Formosa—comes this unusual cover photograph. It was taken in the mountains at Feitou near the capital city of Taipeh by C. J. Yang and forwarded here by Nelson H. Fritz, a frequent contributor to AMERICAN FORESTS. Both men are with the J. G. White Engineering Corporation, and Fritz, himself an enthusiastic amateur photographer, at once recognized Yang's shutter artistry. More of his work will appear in subsequent issues. Scenically, Taiwan is an island paradise, Fritz reports, and he further promises an article which will acquaint readers with this strategically important land.



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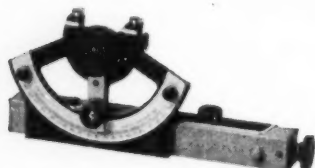


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American  
FORESTS

# Forum

**In This Issue**—Whether you live on the prairies of Kansas, in the heart of the Pacific Northwest or in New York's crowded East Side, it's a safe bet you've seen a Smokey Bear poster on forest fire prevention or been aware of the same message on either radio, television or movie screen. We thought you might like to know more about the progress this campaign is making as it goes into its tenth year, who is behind it and what makes it tick.

It's told in *Smokey Is Convincing a Nation: Only You Can Prevent Forest Fires*, beginning on page 6. **Clint Davis**, enthusiastic U. S. Forest Service tub thumper extraordinary for the Cooperative Forest Fire Prevention Campaign, unfolds the complete story of unselfish public service rendered by an imposing array of big and little people to make this program the success it is. Lacking is the role played by the author himself, but there are those who claim he works so hard he's beginning to resemble the bear on the poster.

Another Big Tree report, based on the most recent information available at AFA headquarters, is now ready for publication in these pages. Part I (Ailanthus through Crabapple) of the list appears at the close of *American Tree Monarchs* (page 22). The list will be continued in succeeding issues. Species, measurements, location and nominator comprise the listings for the champions. Can you find any larger tree monarchs?

Within recent years spot anthracnose has begun to mar the beauty of our flowering dogwoods in some sections of the country. In *Are Dogwoods Doomed by Disease?* (page 12), **Jay Cleveland** discusses the threat at some length. The author is a university professor who prefers a pen name.

Entertaining and informative is *Honeymoon Lookout* (page 16) in which **Helen McDonald Clark** of Butte, Montana endorses a U. S. Forest Service lookout post as an ideal setting for those first few months of married life. The how-to-do theme creeps into *Remember the Ember* (page 18) by telling how to be care-

ful with camp fires, and if you want to know how to cook something tasty after you've built your fire, read *Camp Cookery* (page 11) by **William N. Harwood** of Pocatello, Idaho.

Elsewhere: **G. H. Collingwood**, who served the Hoover Commission as research director for the Task Force on Agricultural Activities, reports authoritatively on the recent consolidation of all forestry activities in the Department of Agriculture as a feature of his *Washington Lookout* column; **James Stevens** continues his *Crockett* tales with the adventure of *Davy and the Golden Bear*; **Anthony Netboy** in *Ten Rivers—Sick and Well*, reports on the President's Water Resources Policy Commission's Volume II; **Albert Arnst** tells about Weyerhaeuser's *Tree Farm Parks*. The editorial pays tribute to Henry S. Graves, great forestry pioneer who died in early March.

**Next Month:** Don't miss William B. Greeley's *Battle of the Secretaries* or Delbert Willis' *Save the Soil and Save Texas*.

**Our Readers Say**—From Philadelphia comes a letter from R. C. Fraunberger, vice-president and general manager of Southeastern Industries, Incorporated, which speaks for itself:

I have just finished careful reading of A. Z. Nelson's splendid article *Do We Need Lumber Price Controls?* in the February issue. I feel competent to comment because I am engaged in manufacturing and wholesaling lumber. I have been active in the work of several lumber trade associations and professional societies concerned with lumber. Presently I am on the Board of Directors of the Philadelphia Wholesale Lumber Dealers Association. As a scholar and student of lumber economics, I was educated at university levels in both forestry and business administration, so call myself a "businessman-forester."

Even though Mr. Nelson's article was prepared before lumber price controls became a reality, it is very significant. His arguments are sound. The lumber black market is now in full force again. Just as he states, price control in lumber is hitting only "at the symptoms of inflation and not at causes."

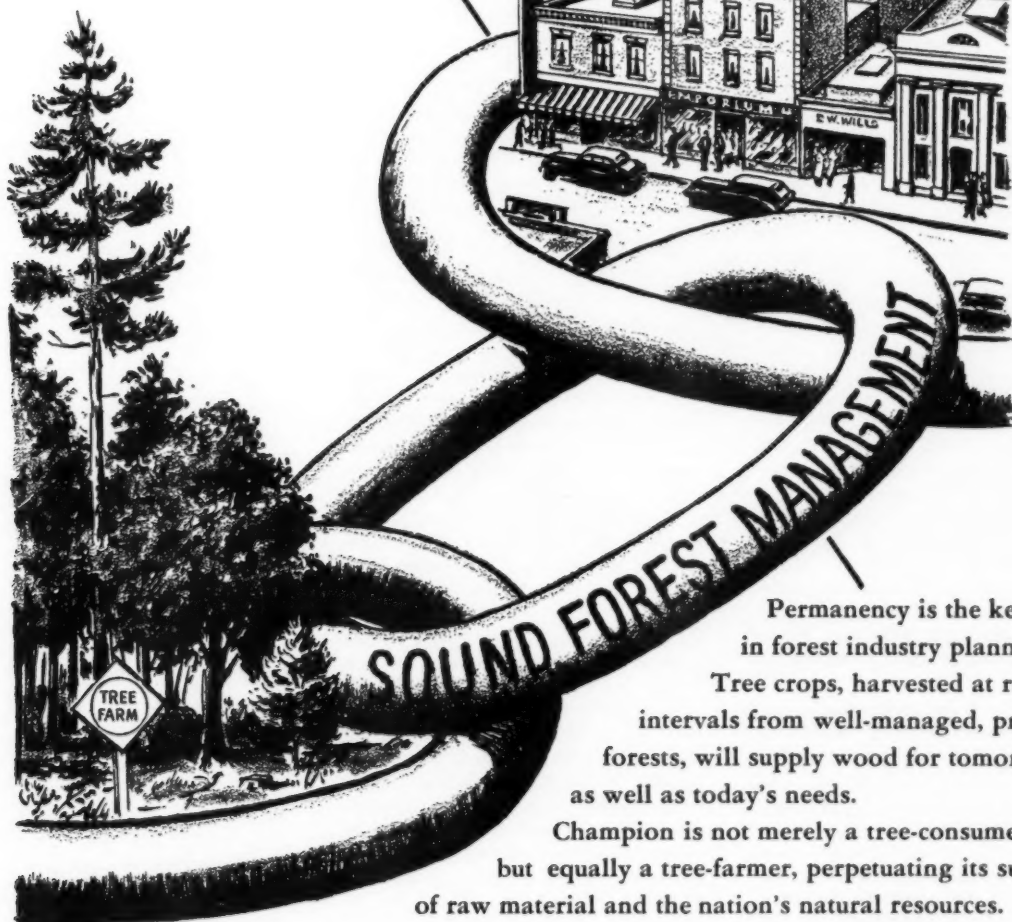
As we now have price controls on lumber, unless controls are also placed on stumpage, the black market is further encouraged. To be consistent, controls should extend back through the raw material or stumpage in this case. However, the laws

(Turn to page 5)



**A**

# Necessary LINK...



Permanency is the key word  
in forest industry planning.

Tree crops, harvested at regular  
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forests, will supply wood for tomorrow's  
as well as today's needs.

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## WASHINGTON LOOKOUT

By G. H. COLLINGWOOD

**C**onsolidation of all forestry activities of the Department of Agriculture under direction and control of the Forest Service became effective February 15, in accordance with a memorandum issued by Secretary Charles F. Brannan. Provision was also made for that bureau to work jointly with the Production and Marketing Administration to determine forestry practices and rates of payment for their application in the Agricultural Conservation Program.

Whether the order solves more problems than it creates remains to be seen, but for the present officials in the Department are faced with the task of untangling a series of Gordian knots that have developed within the past 20 years in conflicting programs of three aggressive and rapidly growing agricultural agencies — Forest Service, Soil Conservation Service, and Production and Marketing Administration.

These consolidations are outstanding features of a far-reaching program for coordination prepared along the lines of recommendations made by the Hoover Commission. They combine under an Assistant Secretary of Agriculture the Department's resources conservation services, previously distributed among the three bureaus.

The entire program has been accomplished under existing powers of the Secretary of Agriculture rather than by Congressional action. In preparing for it, however, Secretary Brannan consulted with the chairmen of the House and Senate committees on agriculture, the chairmen of the two subcommittees on agricultural appropriations, and with other agricultural leaders within and outside Congress.

The order fulfills the Hoover Commission's expressed desire to extend the functional organization of the Department and provide a better grouping of activities related to a common purpose. It does not, however, go as far as that agency would have gone. The Hoover Commission recommended that all major soil, range, and forest conservation agencies in the federal government be brought into an Agricultural Re-

sources Conservation Service within the Department of Agriculture. This order applies only to those agencies now within the Department.

The Task Force on Agriculture recommended apportioning within a single administrative unit the responsibilities of the Soil Conservation Service and the Forest Service, and some of those of the Extension Service of the Department of Agriculture, together with the responsibilities of the Bureau of Land Management and the Fish and Wildlife Service of the Department of the Interior. The grouping of these in one unit with three major divisions or services was recommended.

Under Soil and Water Conservation the Commission would place the federal programs to encourage nationwide adoption of practices to conserve and rebuild lands, as now carried on by the SCS. Forest and Range was proposed as an administrative unit to manage all nationally owned forests, including those on the O & C revested lands, plus forest and grazing programs on the unappropriated domain. Only the administration of the National Forests is now within the Department of Agriculture.

After the manner proposed by the Hoover Commission, the new Departmental order designates the Forest Service as responsible for reforestation, fire protection, and related activities. Where provided, it will cooperate through grants-in-aid with state forestry or conservation departments, land-grant institutions, or other agencies. The Commission would also make a Fish and Wildlife grouping to be accomplished by returning the Fish and Wildlife Service from the Department of the Interior to the Department of Agriculture where it had its beginnings as the Biological Survey.

The recent order, being limited to activities already within the Department of Agriculture, does not mention possible acquisition of the two bureaus of the Department of the Interior. It goes further than the proposals of the Hoover Commission, however, in directing the Forest Service to work with PMA in determining the forest practices to be in-

cluded in the Agricultural Conservation Program and the rates of payment for putting them into effect.

The order divesting the SCS of its forestry program specifies that "the Forest Service, cooperating with state forestry agencies, will be responsible for producing and distributing tree planting stock, developing plans for farm forestry and shelterbelts and assisting landowners in carrying them out."

**Forestry work** left to the SCS appears to be limited to outlining plans for farms owned by soil conservation district cooperators. On these, the SCS will only recommend lands that should remain in trees, the existing wooded areas to be converted to other uses, and locations for planting new woodland areas. Preparation of forestry plans for these lands, plus assistance to owners in carrying them out, now becomes a responsibility of the farm foresters. Salaries and expenses for these men are provided from state appropriations which are considerably augmented with federal monies distributed under the direction of the Forest Service.

Administration of SCS nurseries, which last year produced approximately 13,418,000 tree seedlings, will apparently be transferred to the Forest Service. How these activities will be separated from those of the same nurseries that grow grasses and some 15 million shrubs and plants for windbreak and shelterbelt planting is one of the many problems to be solved. Other problems include the unscrambling of a farm woodland management program which last year applied conservation practices to nearly 3,400,000 acres. This has been part of a program which Chief Hugh H. Bennett, of the SCS, describes in his recent annual report as applying to about 4,772,000 farms and ranches organized in 2285 conservation districts.

**The Secretary declares** the new plan will not alter existing arrangements whereby the PMA has delegated administration of the naval stores program to the Forest Service. The Naval Stores Conservation Program is limited largely to South Carolina, Georgia, Florida, Alabama, and Mississippi where pine trees are "faced" for the production of turpentine and rosin.

Chief Forester Lyle F. Watts described this program as "quite effective in encouraging timberland owners and turpentine farmers to raise more and larger trees per acre. In

1936 the forest survey showed that the average number of turpentine faces per acre for the naval stores region was just under 16. Of these faces, about one fourth were on trees less than nine inches in diameter. Records for 1947 showed that the average number of faces per acre was slightly more than 27, and it was estimated that not more than two percent were on trees less than nine inches in diameter."

These results were achieved under one portion of the general agricultural conservation program which authorizes payments to turpentine farmers and forest owners who carry out approved forest practices. Payments range from half a cent to nine cents for each working face on the operated trees.

This joining of the Forest Service  
(Turn to page 37)

## Forum

(From page 2)

of supply and demand should take care of the situation in the entire lumber field. Controls are inviting more trouble than if the situation were left to run its natural course.

Somewhat similar endorsements came from Charles O. Aschmann of Chicago, from G. R. Gloor of St. Louis and from R. E. Broderick, New York, all representing lumber interests, but surprisingly enough for such a controversial issue, no dissents have been received.

We were taken to task, however, by David H. Caldwell, instructor in wood technology at the New York State College of Forestry, Syracuse and by H. S. Wagner, director-secretary of the Akron, Ohio Metropolitan Park District for several statements by L. L. Huntington in *Bon sai, Dwarf Trees* (February issue). Both took a critical view of the claim to feeding a tree from rape seed fumes, to shrinking a 20-foot tree to three-foot size and to stating without qualification that a ten-inch high tree is 250 years old. "Chances are it is not more than a half inch in diameter, which means that in a quarter inch someone has to count 250 rings," says Mr. Wagner. Both critics also believe the "tiny spruce" pictured is a two-needle pine.

Unfortunately, there isn't space to print their entire letters, but we have a hunch the author may have trouble defending the statements at issue. At the moment, our faces here are red for assuming the article was technically correct.



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Firm or Organization

Address

City  State



**RADIO CORPORATION of AMERICA**

**Smokey is Convincing a Nation:**

# Only You Can Prevent F

Through the Advertising Council's talented bear, a \$25,000,000 cooperative campaign by business, industry and government has since 1942 made great strides in paring a most shameful waste



Planning the 1951 campaign are (left to right) Carl Gustafson, USFS; Irving Grant, Foote, Cone & Belding; Henry Wehde, Jr., Advertising Council; George Dean, state forester of Virginia; Dana Parkinson, USFS; Clarence Prouitt, state forester of Minnesota; Bernie Orell, state forester of Washington and H. J. Eberly, USFS.

**I**N early April, the average American, while listening to his favorite radio program or news report, will hear and unconsciously absorb forceful facts about preventing forest fires. They may be contained in a comedy skit by Fibber McGee and Molly or in a heart-felt plea by Bob Hope to his listeners as he winds up his weekly program of fun and frolic. Other messages will be passed along by Hopalong Cassidy to all the little buckeroos in the land.

During the month commuters on interurban trains, subways, and riders on streetcars and buses in more than 400 cities throughout the country will be exposed to some 95,000 car cards showing a now familiar Smokey Bear against a background

## By CLINT DAVIS

of fire-wrecked forest with his message: "You Can Stop This Shameful Waste!"

Newspaper advertisements, sponsored as a public service by banks, grocery stores and other business firms, will carry Smokey Bear's message, accompanied by rules on how the public can prevent destructive forest fires through use of simple care with fire while in the woods and outdoors. Colorful page ads will appear in such leading magazines as *Time*, *Newsweek*, and *Saturday Evening Post* under sponsorship of some of the nation's top-flight industrial firms. These institutional advertisements will use the majority of their

space and messages in urging the public to protect America's forest, grass and watershed resources from damage or destruction by carelessly started forest fires.

Placards in Pullman cars, posters in railroad stations, and inserts in timetables will remind travelers, headed for distant vacation points, to use care in keeping those playgrounds unmarred by forest fires.

What is behind this drive to enlist the aid of the public in protecting its own heritage and resources? It is another saga of American ingenuity and enterprise put to work for the public interest. It's a story of business and industry joining with government to insure this country's continuing role as an arsenal of democ-



# t Forest Fires

racy. What's more, launching of the 1951 program marks the beginning of the tenth consecutive year of an increasingly successful partnership between government and business to use modern advertising techniques in protecting our forest resources.

It all started back in 1942, shortly after that world-shaking sneak attack on Pearl Harbor. America was girding to defend herself with all her might. Plants and factories were being retooled for articles of war. Manpower was being drained from civilian jobs by the Armed Forces, defense plants, shipyards and aircraft factories.

The danger of uncontrolled forest fires hampering an all-out rearmament program was well recognized. Lumber—billions of feet of it—was needed for cantonment construction, crating, aircraft carrier decks and numerous other defense needs. Huge amounts of pulpwood were needed for paper, cardboard, explosives and chemicals.

Demands on range lands were heavy for the production of meat,

leather, and wool to feed and clothe our troops. Important watersheds had to be protected from fire to prevent any interruption of water flow for domestic use and hydroelectric power so essential in keeping the wheels of industry humming around the clock.

Forest fires were also recognized as a threat to defense and security measures within the nation's boundaries. Columns of smoke would nullify the effectiveness of air raid detection systems. Smoke screens might well protect submarines and other means of enemy harassment. Forest fires had already proved a problem in the vicinity of airfields and artillery training grounds. Smoke interference often made it necessary to shut down essential training programs for pilots and gunners for periods of days. In other areas troop training was hampered because it

was necessary to use GI's to combat and control fires encroaching upon military installations. Another threat, that of the enemy firing our forests was always prevalent.

Here was a real problem and the answer was obvious: (a) reduce the number of forest fires started through carelessness, (b) intensify control operations so as to combat every blaze before it became a serious threat, whether caused by carelessness or enemy action. The answer was simple, but implementing the action presented a difficult task.

State and federal forestry protection agencies were already losing manpower to the Armed Forces and defense plants. Additional equipment for fire fighting or even replacing existing equipment presented a serious problem.

Confronted with these multiple problems, several officials of the U. S. Forest Service consulted with a group of advertising executives in Los Angeles early in 1942 and asked them for suggestions and assistance in obtaining greater public cooperation in preventing those fires caused by carelessness. At that time other members of the advertising industry and leaders in the business world which supported advertising were considering how this vast channel for public information could be placed at the disposal of the government in order to enlist full cooperation of the American people in the many phases of war effort.

Within a few weeks the massive strength of the advertising industry was marshalled under an organization then called The War Advertising Council. Organized, financed and supported by business and industry, it did a tremendous job during the war, sparking such campaigns as the sale of war bonds, scrap metal drives,



Admiring 1948 poster are (l. to r.) George Dean, Clinton P. Anderson, ex-USDA secretary; Lyle F. Watts, USFS chief; and T. S. Repplier, Advertising Council President

Walt Disney's Bambi established the animal poster theme in 1944 and was succeeded by Smokey in 1945





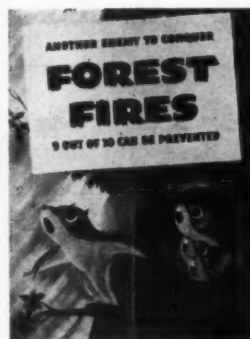
1942

1943



1944

1945



1946

## A Parade of Posters—The



Advertising executives in creative sessions are (l. to r.) Russell Z. Eller, campaign coordinator; Charles Hess, Richard Stowe and Ervin Grant of Foote, Cone & Belding

blood donor programs and many others. One of the first projects accepted by the Council was the Wartime Forest Fire Prevention Campaign—a result of that initial meeting in Los Angeles between foresters and advertisers.

Public response to the plea for care in preventing forest fires was soon apparent. As in other programs dealing with the war effort, people were

being told why forest fires should be prevented and what they as individuals could do about it. They soon began to lend a hand. Man-caused forest fires went steadily downward until 1945 when the number hit an all-time low of 124,728 fires nationwide. This, compared to an average of 210,000 fires before the war, was truly a remarkable achievement.

However, one factor had to be con-

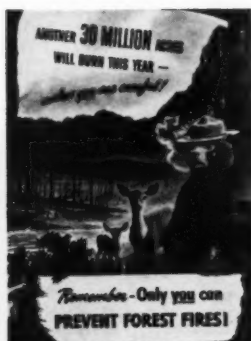
sidered. With millions of men still overseas, and public travel limited by lack of automobiles, tires and gas, it was recognized that fewer people were using the forest and outdoor playgrounds. The real test would come when the country returned to normal and the public could again resume vacation trips, fishing, hunting and other outdoor recreation.

Fortunately, leaders in American business and industry recognized the real public service value performed by The War Advertising Council and felt that such an organization had a place in the post-war years. The name was changed to The Advertising Council, and its fine work continued through the years of demobilization following V-J Day. New programs were drafted—better Schools, Freedom Trains, CARE, Cancer, American Heritage, TB drives. Ranking high among these worthwhile ventures in public service was one of the first campaigns—Prevent Forest Fires.

By this time, the program had officially become the Cooperative Forest Fire Prevention Campaign. It represented a joint effort and official sponsorship of state foresters of the 43 states having fire protection organizations and the Forest Service of the U. S. Department of Agriculture. The support and cooperation of many other organizations was playing an important part in the program.

The Post Office Department and federal bureaus in the Department of Agriculture and Interior were helping to spread material to the public. The American Red Cross, Boy Scouts,

1947



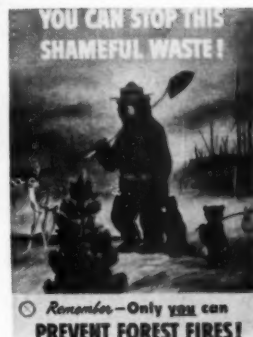
1948

1949



1950

1951



## The Campaign in Review

Girl Scouts, and many similar organizations were strong supporters. On the ground, in the local communities, very effective work was being done by fire wardens, rangers, Keep Green associations, and other organizations. These state and community efforts used the background of the nationwide program as a stage to set up prevention drives directed at specific local problems.

By the end of the 1950 Campaign, it was felt that the occurrence of forest fires could be studied over a five-year period of relatively normal peace-time years. Anyone familiar with forest fires knows that the number of fires for any given year can be misleading. Weather conditions and other factors have to be balanced out for a fair appraisal.

By 1950, use of the outdoors by the public had broken all pre-war records. Registration in National Forests and Parks, sale of hunting and fishing licenses, motor travel, and other factors indicating public use of forests and outdoor areas had in-

creased by approximately 40 percent over 1941, the highest recorded before World War II.

Naturally, more people in the woods means more hazards and results in more opportunities for man-caused forest fires. Theoretically this 40 percent increase in public use of forest areas could well be expected to result in a correspondingly increased number of forest fires. This would give us a normal expectancy, also theoretical, of around 275,000 to 300,000 forest fires a year by 1950.

Another element that makes this theoretical figure conservative is the fact that in the nine-year period between 1941 and 1950 many additional millions of acres of privately-owned forest land had been placed under organized protection by state forest services. This means that where, in the past, many fires on areas lacking protection crews had not been counted or were estimated by only a rough guess, today, protection officials are able to get a more accurate count of the number of fires

and to trace down their causes.

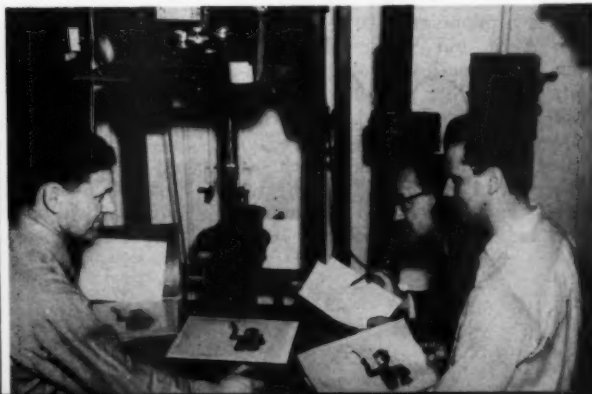
Undoubtedly something was happening; forest fires were on the decrease. In the five-year period from 1946 to 1950, the number of forest fires had been held to an average of 190,000 a year. Nine out of ten of these fires were still man-caused, but compared to the average of 210,000 fires a year up to 1941, forest fires were reduced by an average of 20,000 a year.

Public cooperation was obviously beginning to pay dividends. This fact was apparent in trends other than the reduction in number of forest fires. Many states were getting sound fire laws on the statute books. Public opinion reflected through juries, judges, and justices of the peace resulted in convictions in approximately 95 percent of fire law violations brought into court by 1949. Forest fire protection was being spread to much of the area still needing organized protection services. State forest services were obtaining more realistic financing for protecting private forest

Hopalong Cassidy boosts campaign over his radio program. Author Davis, upper right, listens in



Seymour Payne, USDA; Bill Bergoffen and Rudy Wendlien, USFS, (l. to r.) animate Smokey for movies





lands from destruction by fire.

It is hard to single out every element deserving credit in such a success story as this. Fire wardens and rangers who live and work with the people were certainly a big factor. The school teachers, whether in little rural schools or in big city systems, have helped the story along tremendously. Forest industries working through the Keep Green Program, sponsored by the American Forest



Smokey "rides" a U. S. mail truck

Products Industries, have done a fine job.

But there is one outstanding fact. The American public, through the campaign conducted by The Advertising Council for state and federal foresters, had heard and read more about the need for preventing forest fires than ever before.

Let's look at some of the figures supporting this. In one afternoon last fall, an estimated 12 million people listening and viewing the World Series over combined radio and television coast-to-coast networks heard the announcer give a 40-second plug on why and how to prevent forest fires. Gillette Safety Razor Company, sponsor of the combined broadcast, carried this message to the baseball fans as a public service.

In April and September of last year, the American Tobacco Company plugged fire prevention on five of its weekly network shows during these critical fire months. These included popular programs such as "The Hit Parade," "Jack Benny Show," and others with a Hooperated audience of seven million peo-

ple each week. More than 100 other big-time advertisers—sponsors of network programs—used forest fire prevention messages during the six weeks assigned to the Campaign under The Advertising Council's Radio Network Allocation Plan. Total listener impressions for these combined shows were estimated at seven billion.

Readership coverage on forest fire prevention messages in newspapers and magazines was equally as impressive as the number of listeners to radio and television programs. Full-page ads by such sponsors as Caterpillar Tractor Company, Aetna Insurance Group, *The New Yorker* Magazine, and the International Nickel Company of America were carried across the board in national magazines having a circulation of better than 15 million. More than 11 thousand display ads were carried in newspapers, ranging from county weeklies to big dailies with wide circulation. These ads were sponsored and paid for by local business firms or run as a public service by the newspapers.

Car cards presented colorful fire prevention messages to an estimated 50 million riders on streetcars and buses during the months of April and September last year. One publishing company, The National Comic Group, printing 33 different comic and adventure story magazines, carried full-page forest fire prevention messages in each publication. These publications have a combined distribution of ten million copies.

The total value of the advertising space and radio time allotted to forest fire prevention in 1950 alone is estimated at four million dollars. During the nine years in which it has been conducted, the total value of advertising time and space donated to this program by public spirited business and industrial firms is estimated to be in excess of 25 million dollars, a sizable advertising budget for any program or organization.

In addition to all this "free-of-charge" advertising time and space, the staff of The Advertising Council has donated its services for direction and guidance in the program. Members of Foote, Cone and Belding advertising agency and the coordinator of the campaign, Russell Z. Eller, advertising manager of the California Fruit Growers Exchange, plan and develop ideas, designs, and copy for the various pieces of material without charge to the government.

At the Los Angeles office of Foote, Cone & Belding, where each year's program is created, the staff jokingly

refers to the Forest Fire Prevention Campaign as its "unbillable account." Yet, one of their top experts, Ervin Grant, account executive of the Campaign, spends a sizable amount of his time each year in developing the program. The agency's art director, Dick Stowe, works up ideas for posters, car cards, news ads, and pamphlets in rough outline and supervises preparation of final art by top-flight freelance professional artists.

Don Belding, Chairman of the Board of Foote, Cone & Belding, who has backed the planning and direction of this campaign from its inception ten years ago, says that the program, while in his plant, gets the same attention and critical review in conferences as any other advertising program the organization plans for commercial accounts. Foote, Cone & Belding estimates the time and services of its staff used on Forest Fire Prevention would be billed at 35 to 40 thousand dollars a year if provided for a commercial firm. For an 11-year period (the 1952 Campaign is already on the drawing board at the agency) this adds up to a contribution of around half a million dollars—an outstanding service in the public interest.

Apparently Foote, Cone & Belding doesn't consider this program too much of a burden, because The Advertising Council diplomatically offered them a way out several years ago by suggesting that the campaign be assigned to another agency in order to prevent "riding a good horse to death."

Don Belding's reply was contained in a promptly written one-paragraph letter to Ted Repplier, president of The Advertising Council. He stated that his agency was willing to continue planning and supervising the Forest Fire Prevention Campaign as long as the foresters were happy with the service and public response was good.

In light of this attitude, and the feeling of appreciation on the part of state foresters and U. S. Forest Service officials for results accomplished to date, it looks as if Forest Fire Prevention will continue to ride the books of Foote, Cone & Belding as in "unbillable account" for many years to come.

The CFFP Campaign has been just another example of applying tried and proved methods of advertising technique and know-how on a mass-audience basis. This is carried out by developing a theme for each year's program, dressing it up with colorful

(Turn to page 40)



# CAMP COOKERY

Outdoorsmen, spare that chef! With these simple cuisine capers you can give that overworked gent—and the frying pan—a much-deserved rest

By WILLIAM N. HARWOOD

IT is often said, and rightly so, that the most overworked chap around a camp is the cook. Too often this burden results in an utter lack of imagination, not to mention a sadly overworked frying pan. Here are a few cooking stunts which will not only lighten the burden on the cook, but will add years to the life of that frying pan.

Stow your frying pan away in a duffel bag and try fish broiled gypsy fashion. Split the fish down the middle and nail the parts, flesh side out, to a piece of board. Above each split fish place a piece of fat bacon and prop the board up close to the fire. The fat from the bacon will dribble down over the fish, basting them as they brown. The flavor added by the bacon fat makes a fish dish that's hard to beat. The gypsy style fish is shown in Figure 1.

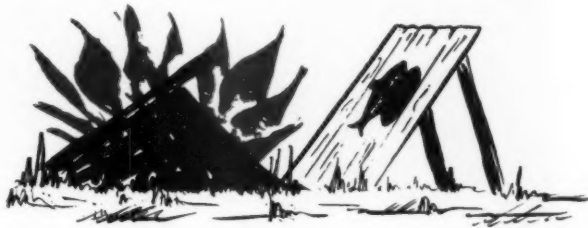
Figure 2 shows how to barbecue small game, steaks or chops, while the frying pan is getting its well-earned rest. Lay two green logs parallel to each other, about 16 inches apart. Build a fire between them. While the fire is burning drive down to coals for cooking, drive four forked stakes at the ends of the logs and connect the tops with two poles. Prepare the meat for barbecuing by spitting it on two sticks of sweet green wood. If you are cooking squirrels, rabbits or other small game split them down the middle so they will spread out flat over the heat. As in the gypsy style fish, place a piece of bacon over the meat to baste it. Or you can tie the bacon to a stick and swab the meat with it every three minutes.

Game birds of any size can be roasted with the arrangement shown in Figure 3. Drive two forked sticks into the ground and connect them at the tops with a pole. Tie the bird's legs together and secure the wings close to the body. Season the fowl with salt and pepper inside and put a piece of bacon in the abdominal cavity.

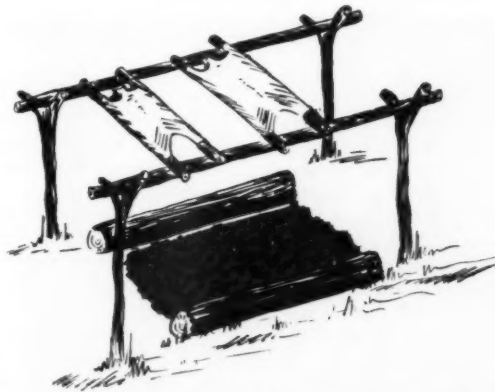
Suspend each bird by a cord in front of the fire. Do not hang it di-

rectly over the fire but out about two feet from it. Set a pan under each bird to catch the drippings. To baste use a mixture of salt, pepper, vinegar and the drippings from the pans.

Baste every three minutes and give the bird an occasional twist so it spins and turns all sides to the heat. When the lower end has browned, re-  
(Turn to page 34)



Here's a variation in method that pays dividends in extra flavor and economy of effort. It's fish broiled gypsy style



All you need for a succulent barbecue is some small game, a fire, and a few logs and saplings from the surrounding woods



No oven necessary . . . and game birds roasted in this fashion are a treat that makes every outing seem like Thanksgiving



# Are Dogwoods Doomed by Disease?

By JAY CLEVELAND

**"T**HE enchanted dogwood with its ivory trays"—lauded by the poet Richard Le Gallienne in his "Catalogue of Lovely Things"—may be doomed to eventual destruction by a blighting fungus that is spreading slowly through growths along the eastern seaboard.

First reported about three years ago, the spot anthracnose disease has attacked both pink and white flowering dogwood (*cornus florida* L.) in Delaware, Florida, Georgia, Maryland, North and South Carolina, Virginia, and West Virginia. Temporarily limited to areas south of the 39th parallel, the disease has not yet been

reported north of Wheaton, Maryland—nor has the infection yet spread to famed Valley Forge and other dogwood-embellished points in Pennsylvania.

The pathogen or causal agent of the fungus is *Elsinoë Corni*, tree experts have reported. First detected in 1948, the disease has been intensely studied by scientists of the Universities of Georgia, Maryland, and the U. S. Department of Agriculture in roadside surveys, nurseries and private growths.

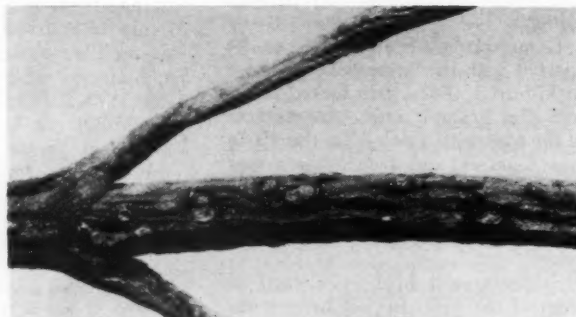
Though upper crowns of the dogwood trees are affected less, many infected trees have developed a sparse,

brownish appearance in the lower crowns. Superintendent Sam Weems of the Blue Ridge Parkway in Virginia said he has noticed that "about 50 percent of the trees in the Parkway south of Roanoke are infected and in one section it is epidemic."

The infection has been severe and extensive on ranges around Atlanta, Georgia, Lynchburg, Virginia, and southern Maryland, gradually decreasing northward. Some spot anthracnose has been found on residential properties around Snow Hill, Maryland, too. In fact, plant pathologists found the disease severe in many Appalachian areas last fall.

A blighting fungus, anthracnose, is spreading slowly through growths along the eastern seaboard. First reported in 1948, it is already causing destruction in eight states

Attacks ravage stems of both pink and white flowering dogwood, but as yet have not spread north of Wheaton, Maryland



Surveys taken through 1950 indicate the disease (until recently obscure and but slightly known to plant experts) is infecting these beautiful flowering trees in quite general fashion. Not only is living foliage being ruined, but so are the pink and white bracts, stems and ripe fruit. Especially noticeable are leaf spots and stem cankers.

Some shoots, too, are badly diseased and leaves lacerated, spotted, and turned to reddish gray and weak, yellowish gray. In many infected sections leaf tissues are fragmented away, leaving "shot-holes" or skeletonized areas. Floral bracts or trays have shown scattered, grouped or single anthracnose infections.

Lesions seem to appear on each new season's growth in April and May almost as soon as it develops, later disfiguring entire trees in varying degrees of severeness. The spot fungus has been reported much more widespread and damaging on low trees, in private estates, public parks and city gardens—but especially on open-country ranges cut back by roadside maintenance crews.

In this respect, Dr. R. A. Jehle and Dr. Anna Jenkins (Division of Mycology and Disease Survey, USDA Bureau of Plant Industry, Beltsville, Maryland) have ventured the suggestion that "the disease may be spread along highways by roadside crews. . . . It is probable man has been a factor in spread of the disease."

Infected specimens collected from both voluntary and official sources have been analyzed microscopically in the herbarium of the Department of Plant Pathology at the University of Maryland, and in the Mycological Collection of the USDA Bureau of Plant Industry, Beltsville, Maryland.

As an aid to its detection and control program, the Beltsville laboratory invites the public to send it specimens of flowering dogwood (branches, foliage, fruit, or blossoms) believed to be affected by spot anthracnose or other diseases. Samples should be pressed dry before sending.

The blight was first observed in 1948 by Dr. A. A. Bitancourt (plant pathologist of Instituto Biológico, São Paulo, Brazil) in Savannah, Georgia. At the time this fungus was unclassified, though later Dr. Julian Miller, professor of plant pathology at the University of Georgia in Athens, found that the new disease apparently is peculiar to dogwood and



**Infection of green dogwood fruit. The organism lives during the winter in such lesions and in infections on tender twigs. Spores from the infections are produced during warm weather**

*Photos by U. of Maryland Botany Department*



**Well defined nature of the individual infections is evident in moderate attacks on bracts (petals)**

**Severe infection of the bracts disfigures and destroys their attractive display, main appeal of the dogwoods**



survives winter cold in buds, dead leaves and branches, ranging from New England southward and west to Michigan. He reports:

"It has become a serious problem on some of the streets of Atlanta, as well as in public parks and on private grounds in other sections of the state. It does not seem to be prevalent in the woods of Georgia, except up in the mountains.

"The symptoms consist of small spots about one millimeter in diameter on the blooms and on the leaves. They are heavily infected in the spring and the appearance of the blooms is seriously altered. This is the only disease I know of that attacks the dogwood blooms. Other organisms that attack the leaves come late in the summer and do not cause much damage. You can distinguish this by the small spots with the centers falling out, giving a shot-hole appearance to the leaves.

"I have been suggesting spraying the trees with a 4-4-50 Bordeaux mixture or with Fermate at the rate of two pounds to 100 gallons of water. I think two sprays put on ten days apart before the tree blooms should control it at least to the extent of having satisfactory blooms."

Dr. Joseph Ibberson, chief of the Division of Research, Pennsylvania Department of Forests and Waters in Harrisburg, reports:

"To our knowledge, this disease has not been reported north of Wheaton, Maryland. However, we have been on the lookout for it in Pennsylvania. The Pennsylvania Department of Agriculture is considering a quarantine on the importation of dogwood from neighboring states. A

successful control measure to date consisted of spraying early in the season with Bordeaux mixture and then later with equal parts of Fermate and Deenate."

Flowering dogwood—one of America's loveliest ornamental trees and state flower and tree of Virginia—battles for survival against other enemies besides spot anthracnose. Another disease, caused by *Ascochyta cornicola*, causes spots and shriveling of the leaves. In 1950 it was reported epidemic throughout mountain areas of Virginia and North Carolina, and also was epidemic in 1942 throughout the same area.

The trees also are bothered by *Botrytis* blight in times of unusually wet weather. This disfigures the leaves with brown blotches. Then, too, the trees are prey to borers (*secia scitula*), whitish caterpillars which girdle them by undermining their bark. Control of borers can be partially effected by digging them out with a wire or other sharp instrument.

Dr. W. F. Jeffers, professor of plant pathology, University of Maryland at College Park, reports:

"This past season there was very serious damage to dogwoods in much of their natural range. In our local area I estimated that from 60 to 75 percent of the trees were affected. However, the true nature of the trouble was not found. It definitely was not due to anthracnose, a disease which is not serious in Maryland, and should not be confused with the unknown trouble which was so prevalent this past season. I realize that there are other known dogwood killers, but none of them seemed to ex-

plain our situation this year."

Harbinger of spring in northeastern and central-Atlantic states, the spectacular dogwood is considered one of the most beautiful and richly-rewarding small flowering trees. Though actually it is a year-round show tree, its gorgeous pink or white displays make a veritable spring fairyland of hallowed Valley Forge Memorial Park, and other public or private public gardens throughout the East.

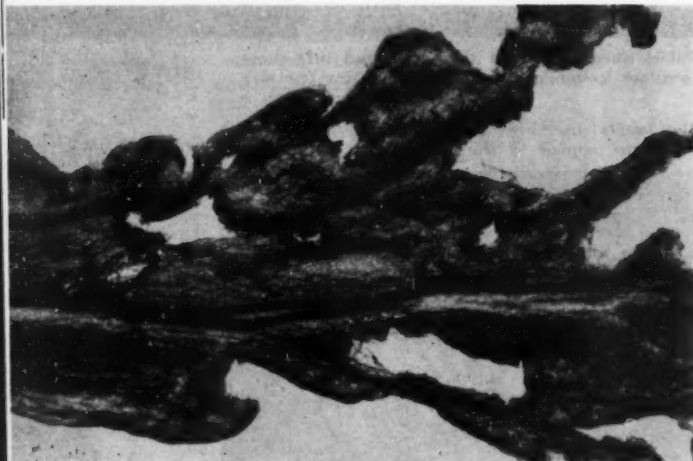
The masses of blooms which bedeck these bushes in early spring are really not blossoms. The true "flowers" are small, greenish yellow, and very inconspicuous.

*American Forests* readers who love *cornus florida* for its decorative values will be interested to know that its wood has had wide usage. It has been made into weaving shuttles, and turned articles such as instrument handles, golf-club heads, mallets, and for jewelers' and engineers' tools.

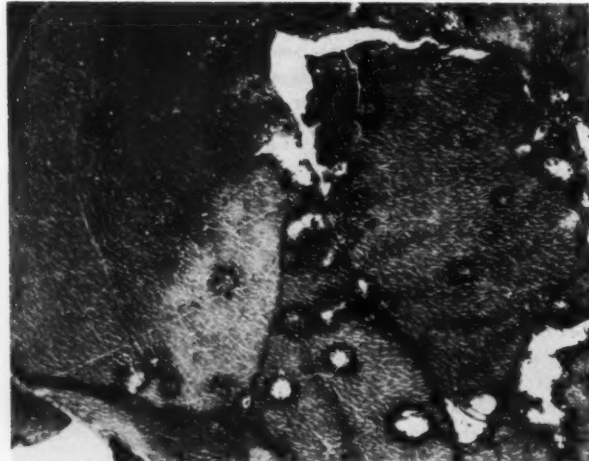
Will spot anthracnose and other diseases conspire to eventually exterminate the "sacred" flowering dogwood—just as a blight fungus wiped out all of America's chestnut trees and now threatens the oaks? Perhaps control measures advocated by Drs. Ibberson, Jeffers, Jehle, Jenkins and Miller will reduce or stop the infectious spread. But this much is certain:

Pink and white dogwood trees will someday bloom in even greater profusion across the 48 states. For at the 1950 Valley Forge Scout Jamboree 47,000 packages of the trees' seeds were given to the boys who attended, to be dispersed by them to every corner of the nation!

The diseased parts of leaves fall away when anthracnose attacks only in spots



Enlargement of a diseased dogwood leaf shows mutilation in its early stages





A gigantic golden bear takes our hero "for a ride" in the fourth chapter of a Davy Crockett series



## DAVY AND THE GOLDEN BEAR

By JAMES STEVENS

THE Seven Devils country was the southernmost haunt of the rare golden bear, Uncle Ben Cotter said. He brought up the subject at random after coming around to the bunk shack for what was supposed to be a talk on the grub question with the hands of his little logging and mill outfit in the pines of southern Idaho.

"According to the Indians, the golden bear was a cross between what we know today as the giant Kodiak bear of Alaska and the silver-tip grizzly of the Rockies," Uncle Ben drawled away. "The golden bears grew to be bigger and powerfuller than either of the parent breeds. They grew shy of men and took to the Seven Devils for a wild and lonesome habitat. The Indians believed that feeding on the meat of a golden bear would make a mighty warrior out of any man who was able to bring one of the kingly critters to pot. Why, it was a winter on golden bear meat in the Seven Devils that put the true touches on Davy Crockett as a king among men.

"Of course," said Uncle Ben, "any kind of bear meat today will do a lot to build up the man who has the luck to eat it. Any kind of bear meat," he repeated. "Yum! Oh, what rare eating!"

"I can be all the man I want to be on baldface steer," stated Pret Al-

bin, the scowry and sagacious on prize sheep roast, "I can stand for a spell." Then he glared grimly at Uncle Ben and added, "But bear I can't abide."

"Least of all bear hash," a logger chopped in.

Uncle Ben Cotter did not seem to hear the remarks or see the scowls around the circle out in front of the bunk shack. He primed his pipe, staring away toward the fadeout of sunset glow on the west shoulder of Mt. Hitt. I thought he had the look of a prophet of old seeking a heavenly sign.

It was another eventide back in the summer of 1904, when I was in the middle of my twelfth year, and starting out to make my way alone in the world. I was extra hand in the camp, at the rate of 50 cents a ten-hour day and my board. Uncle Ben Cotter was the kindest man to speak with and work for that you could imagine, but he was cheap on wages and board. He tried to keep the camp in meat by Sunday hunting of cottontails, grouse, deer and bear. His luck lately with bear had been simply too good. We'd been having nothing else on the table but bear stew and bear hash, with sourdough biscuits, water gravy, sorghum molasses, dried apples, and what Uncle

Ben Sunday treat, stewed sardines and berries.

"Why this great country of our'n was built practically on bear meat," Uncle Ben Cotter sort of mused along. "Bear stew pulled the Pilgrims through. Bear hash all but won the Revolutionary War. Where would Lewis and Clark have been with no bear? Abe Lincoln was weaned on bear 'knuckles. Bears were grub, clothes, blankets and rugs to Dan'l Boone. Bear meat was likewise the staff of life to Davy Crockett. It—along with alligator meat. But it was the winter in the Seven Devils that truly made Davy, for there he had the experience with the golden bear.

"Davy Crockett was not only raised on bear meat but his spirit was nourished on bear stories," Uncle Ben narrated on. "His Uncle Roarious kept bears around the place like some other settlers kept slaves. His uncle was the first Crockett to go to Congress. The Vice-President came to call, failed to see who let him in, then turned to find a fat black bear standing there holding his coat, hat and cane. The screams he let out cost him the Tennessee vote next election. The Crocketts and their kin had no use for any politician who would take fright from a bear butler.

"Uncle Roarious kept his bears at home in cold weather by giving them

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Visitors to Fly Peak were few, but they found the view worth the climb

## Honeymoon Lookout.

By HELEN McDONALD CLARK



**I**F you have ever spent a summer on a lookout for Uncle Sam, you will never be the same again! Your sense of observation will be more keenly developed. You will look upon the forest as your own heritage and your own responsibility. You will never condone a "flipper," for you will lecture on the spot anyone you see negligently tossing his cigarette butt to the grass.

You may be riding along the highway, but your eye will be constantly scanning the distant horizons, watch-

ing the timbered mountains for tell-tale wavers of smoke. You will yearn for the mountains when spring comes, and if you deny their calling, you will feel a lonesomeness all summer that you cannot explain.

My husband and I loved our lookout peak—it became a part of us. So, too, felt the other young married couples we met in the forest. It is becoming more and more the policy of Uncle Sam's forestry department to send married couples to the lookouts, for it has proved the best way of combating the loneliness of that isolated life.

If you have never been in the forest, or if you have a great affinity for

Honeymooners bid farewell to their little glass house atop mountain

AMERICAN FORESTS

**If you and your spouse yearn for the secluded and serene,  
there's a job waiting for you both spotting forest fires**

has worked on and off in forestry over a period of years. He is an experienced hand at fighting fire, packing, and trail blazing. So our application for a lookout was immediately accepted and we were assigned to Fly Peak in the Challis National Forest of central Idaho.

I believe our honeymoon summer on a lookout peak will be one of the most memorable summers of our lives. For this reason we want to spread the word to others that lookout life is a wonderful experience.

Your home is a glass house, with shingled roof and stone foundation. The scene from your circumferencing windows is of forested mountains and ravines. For hundreds of miles your view is timber and sky. Far in the distances, you can see little humps on other mountain peaks, and these, too, are lookouts, so you know that you are really not alone.

Privacy will be yours, for often the road leading to your lookout is merely a narrow, winding trail thousands of feet above sea level that you take on foot or horseback. Our lookout was the only one in our forest that could employ the use of a car, for the road wound right to our door. But so steep was it that many of the tourist cars had to stop at the turn-off on a lower landing. We had visits from Boy Scouts, 4-H boys, sightseers and dudes.

If you are on a loftier lookout, which is the rule, as our peak was the exception, your only visitors will be the packer, who brings in your month's supply of groceries and mail, and the forest supervisor, who makes at least one official visit, or some far-journeying tourists from the dude ranches in the mountains. Sometimes a plane might wink its wings at you as it flies over. Sometimes the Forest Service might send you provisions by plane via parachute.

What are the advantages to a couple of a summer spent on a lookout? If you are a lover of beauty, you are constantly surrounded by it. The sunsets at the high elevation where you dwell are gorgeous. The wildlife that visits you—fawn, yearling, doe, grouse, bobcat, bear, cougar—is beautiful to behold. Even the devastating forest fires you seek to prevent are scenic wonders.

You can make and save money on a lookout. There is no electric light bill, no gas, telephone or fuel bill. Your only item of any great expenditure is food, and if you shop carefully and in bulk, you can economize. While hubby goes to fire school, wife goes shopping. I purchased a goat! Oh, sorry day for Butch, because like Mary's little lamb, everywhere that Butch went, the goat was sure to go. Since tea and coffee are too stimulating to my nerves, I decided a goat would furnish me the quantity of milk I desired.

"Thank heavens," said Butch when he eyed my purchase, "you didn't buy a cow!"

Since I am city born and bred, I am a poor hand at milking. "It must be an easily-milked goat, Mr. Higgle," I insisted at the ranch. When Butch would be called away to fight fire in our locality, I knew I would have to do the milking.

"You must have a goat that won't get lonesome," rancher Higgle told me. "I have just the animal for \$10." So little Katie joined our family circle, becoming such a pet, (Butch would say pest) that we—I—could not part with her at the terminus of fire season. She is pure white, with long curving horns and whiskers.

Katie grazed on the bunch grass and wild onion growing on the peak, and seemed to enjoy spruce and pine  
(Turn to page 42)



U. S. Forest Service Photo

the wilderness, lookout life is the life for you. We urge it from firsthand experience, for we honeymooned on a lookout!

We chose to honeymoon on a lookout for several reasons. We both have an innate love of the outdoors. We both believe strongly in the code of conservation. And we felt that in these times of high-priced living, we could not afford to honeymoon in distant parts.

My husband, Eugene, better known as Butch, is a native of Idaho, and

**Emergency water supplies—a forest lookout "must"**



**Drawing the precious liquid is a periodic chore**





# Remember the

**I**F you are one of the millions of Americans who will spread their vacations over weekends for the summer, you probably will enjoy several cook-outs or overnight camping trips this year. If so, make sure you don't leave a fire behind.

Thousands of fires every year are traced to the carelessness of campers or other sportsmen. Of the 575 forest fires that break out in the U. S. every day, an estimated nine out of ten, or about 517, are man-made, according to U. S. Forest Service reports. About seven of these ten are started by careless hunters, fishermen and other campers.

Besides their appalling toll of timber and human life, forest fires also wreak havoc with wildlife. The forest is the home of the deer, the bear, the chipmunk, the squirrel and many birds, while the streams are the haven of trout. When fire strikes in the woods it may travel so fast it outruns even the deer. All too often, many are trapped and burned alive.

Realizing this immense danger, most campers are safety-minded, fire

experts believe. These temporary dwellers in the woods remember to take along the right kind of equipment, are on the lookout for newer and safer camping materials and generally realize the inherent dangers in thoughtlessness.

Forest rangers come across all sorts of silly antics of campers. One camper reported to police that he had lost a fire up on Bear Mountain recently. He said he couldn't find his charcoal stove and he was afraid that it wasn't out. Police later saw smoke coming out of a parked car. They broke into it and traced the fire to the trunk. The camper had absent-mindedly thrust his stove, still burning, into the trunk and gone for a walk.

In no other country in the world do people set fire to their natural resources with the abandon with which Americans burn their finest timberland and game preserves. Every year more acres of precious woods are burned than comprise the state of New York.

With simple care, however, fire



**In building campfire, scrape away all inflammable material within a five-foot radius and keep the fire small as possible**

**This couple takes the sensible precaution of having can of water handy just in case**

Photos courtesy National Board of Fire Underwriters





# Ember

An estimated 90 percent of the 575 forest fires that break out in the U. S. every day are man-caused. You can help cut this appalling waste by making sure your fire is out before leaving camp

authorities point out, this indiscriminate destruction can be reduced.

Campers, whether they're away for a weekend or an afternoon cook-out, should be especially careful with matches and cigarettes. These are the real culprits. At least 51 percent of all forest fires are started by carelessly tossed cigarettes.

Before throwing away your cigarette, crush it out until it's cold. With matches, exercise the same dividend-paying caution. Break them in two, then hold each end until it's cold. Smoke only in safe places. This means areas that are fairly clear of trees. Keep ashtrays in your car—and use them. Don't throw cigarettes out the window.

When you are building a campfire clear a circle about five feet in diameter for your fire. Within this circle brush away all leaves, papers, flammable material. Keep the fire small.

When you are ready to leave it, soak the fire with water, stirring the coals and turning the sticks to drench both sides. Soak the ground to be sure the last spark is dead.



One sure way to reduce the number of forest fires—use the ashtray instead of tossing cigarettes out your car window

Drench embers thoroughly. Wind may fan them back to life. Also, turn sticks to make certain that both sides are wet.





A battlefield shrine in Oregon marks two significant events—a grim but little-known chapter of World War II, and a trend toward industry-provided forest playgrounds for the public

## Tree Farm Parks



A monument, at right, commemorating six victims of a Japanese balloon bomb explosion, was dedicated last summer on tree farm land belonging to the Weyerhaeuser Timber Company, which sponsored the memorial. Crowd stands at attention to hear national anthem

A national battlefield shrine on a lonely woodland slope in southern Oregon also marks a unique trend in the field of industrial tree farming. Here, where a woman and five youngsters were killed May 5, 1945 by a Japanese balloon bomb, Weyerhaeuser Timber Company has dedicated a monument and public recreation area commemorating the six dead and one survivor in a grim and comparatively unknown chapter of World War II.

This trend is manifest in the ever-increasing recognition being given to the multiple-use aspects of commercial timberlands by the major pri-

By ALBERT ARNST

vate owners in the Northwest. Wherever recreational uses are compatible with the dominant land management program of sawlog and pulpwood production, private funds are being expended for the development of facilities dedicated completely to public use.

When Weyerhaeuser last summer set aside the timbered spot near the logging and ranching community of Bly, it was amply demonstrated that such dual utilization of forest areas is a practical and productive scheme. Called the Mitchell Recreation Area,

the park was named in honor of Mr. and Mrs. A. E. Mitchell, leaders of the picnic party which met with lurking disaster.

The Japanese bomb invasion of America was a little-publicized phase of the last war. Unleashed by the thousands during the closing days of the war, late in 1944 and early 1945, these fiendishly contrived air-borne weapons were engineered to drop incendiary and fragmentation bombs on American forests, farms, and cities.

The large hydrogen-filled balloons soared to the United States without human guidance, on prevailing air

currents at altitudes of 30,000 to 35,000 feet. They were equipped with a tripping device actuated by a barometer, which unloosed a series of sandbags to keep the balloons at a constant altitude. A release mechanism dropped three or four bombs after the ballast bags had been dumped. The theory was that the bombs would be released after the balloons had reached the American continent.

Although the balloons and their lethal cargoes landed in widely scattered parts of the western United States, they inflicted no reported damage and the six in Oregon were the only deaths. The bombs' greatest potential threat was as an incendiary menace to western forests, whose timber crops were vitally needed for war supplies. For that reason, fire-fighting units were organized to cooperate with federal and civilian agencies in protecting the forests. At the same time, a cloak of press and radio secrecy was dropped over all reported landings, so that the Japanese would have no idea of the successful range of their missiles.

This press censorship made it difficult to warn people. The unsuspecting Bly church group, enjoying a picnic outing, found one of the grounded balloons in the surrounding ponderosa pine timberland, innocently picked up its parts and apparently tugged at the detonator. The resulting explosion killed Mrs. Elsie Mitchell, wife of Reverend Mitchell, and five children, Jay Gifford, 13; Edward Engen, 13; Dick Patzke, 14; Joan Patzke, 13; and Sherman Shoemaker, 11.

Signs on Spirit Lake Highway indicate places where Weyerhaeuser has developed public parks through its program of multiple use



APRIL, 1951



In areas where compatible with sawlog production, private industry is creating public campgrounds equipped with permanent facilities

At the memorial dedication last summer, army, state and company officials in a brief but impressive ceremony paid tribute to these civilians who lost their lives for the cause of democracy.

The event was significant, also, because it marked the continuation by Weyerhaeuser of a recreational development program initiated on its tree farm lands in 1949.

The Mitchell Recreation Area is accessible by forest road during the summer season. Appropriately signed for public attention, it offers camping and picnic facilities such as tables, outdoor stoves, rest rooms and garbage cans. Two boxed and protected springs provide cold water for cooking and drinking. The monument area itself, surrounded by a high industrial wire fence, is protected as a sanctuary. The camping site is cleaned up and provided with firewood. This development program

was carried out by Weyerhaeuser's Klamath Falls, Oregon operation, under the direction of Manager R. R. Macartney.

In the summer of 1949 the company's Longview, Washington branch operation developed five park areas adjacent to beautiful Spirit Lake highway, which passes through a portion of Weyerhaeuser's 500,000-acre St. Helens tree farm. The parks are in naturally forested areas, ranging from mixtures of hardwoods and evergreens to virgin Douglasfir. Each site is next to a stream or creek and has been provided with rest rooms, tables, fireplaces and firewood.

Through the efforts of Manager Harry E. Morgan the natural beauty of the thirty-mile stretch of highway, with its vistas of regal snow-topped Mt. St. Helens, will be preserved. Dangerous or esthetically undesirable snags are being felled along most of the timbered corridor. Tree plantings have been made to screen a few places where World War II logging roads crossed the highway. Local youth groups from Cowlitz County have joined in these tree planting programs, which have won support from the public.

In all the park areas access roads have been provided and large signs placed on the main highway for public guidance. The Washington State Highway Department is cooperating in keeping the park sites clean.

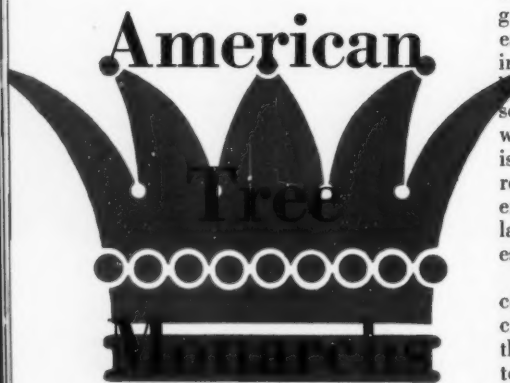
The parks have met with tremendous public success and have aided the long-range community relations program of the company. One of the principal advantages of such a development is the isolation and concentration in a known area of the ever-present fire risk associated with unregulated use of tree farm areas by the public.

Accommodating an ever-increasing  
(Turn to page 34)





Giant among giants—a mammoth sequoia in General Grant Park, California



AFA revises and brings up to date its report on big tree champions. 286 species are included in 1951 list

IN this issue, *American Forests* presents the first installment of a revised report on the status of America's tree champions. The detailed report, giving location, species, group, dimensions and nominator of each tree monarch, will be continued in succeeding issues. The third published by The American Forestry Association since the big tree campaign was launched in 1940, the new report is in response to numerous queries, requests and submissions by tree lovers throughout the nation concerning latest available figures on these forest sovereigns.

Tree champions, like their human counterparts, sometimes wear uneasy crowns. They are likely to be dethroned by a more massive competitor, are subject to the ravages of disease, to the elements or to thoughtless commercialism. Occasionally they have achieved eminence through mistaken identity or location. Consequently, any listing of the tree world's "best of class" is constantly subject to addition and revision and use of the word champion is in the strictest sense unofficial.

It is recognized also that figures on some of the specimens in this report are not current because a re-measurement may not have been taken since 1946 when the Association compiled and published its last re-

port on big trees. Data is the latest available before going to press. Common and botanical names listed conform to *Standardized Plant Names*, a book issued by the American Joint Committee of Horticultural Nomenclature. Identification and measurements are by the nominators.

Going into its twelfth year, the Association's campaign to locate and preserve the largest specimens of American trees is still a flourishing movement. Launched in 1940 to halt the tragic disappearance of these magnificent trees, the program has attracted wide participation and has focused attention on the incalculable benefits of conserving these cherished natural landmarks for this and future generations.

The search for big trees is more than just a contest. It is more than

---

**DETERMINATION OF bigness** in trees listed is based on the sum of dimensions of circumference, height and spread. To the total inches of stem circumference (four and a half feet above ground) is added the total height in feet plus one-quarter of the crown spread footage. This gives a single figure denoting aggregate growth, with circumference as No. 1 factor, followed by the height and crown spread.

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Tennessee is the home of 140-foot-high patriarch of Baldcypress species

just a temporary gesture toward conservation of something that is the finest of its kind. While the search is in a sense competitive it is also co-operative and by that very fact becomes more of a nationwide project than a localized vying for honors. Nor is the search a temporary gesture, because the efforts behind it are continuous and the benefits received may well run into the centuries to come. The lives of some trees are measured in the thousands of years.

If you know of a tree of the same species larger than the one reported here make it your business to see that its full and accurate record is sent to The American Forestry Association. Include its identity as to species, its circumference four and a half feet above the ground, its estimated height and spread, its state of preservation, and, particularly, its location and ownership. Also, be sure to send a photograph of the tree.

This big tree campaign is not to be confused with the Association's Hall of Fame project which was inaugurated in 1920 after widespread planting of memorial trees (in which the Association also had taken the initiative) had made more people tree conscious. In nominating a candidate for the Hall of Fame, size has no particular significance. Only those trees authentically connected with history such as "The Charter Oak" at Hartford, Connecticut and "The Treaty Oak" at Washington, D. C. are given recognition.

The 1951 roster of big tree champions includes 286 species in 88 different groups. This is an increase of 37 species and eight groups over the listing made in 1946. The eight groups not previously reported are Ailanthus, Blueberry, Bumelia, Chinaberry, Crapemyrtle, Devils-Walkingstick, Soapberry and Yucca. These superior specimens are found in all sections of the country — the South, the West Coast, the Pacific Northwest, the Midwest, the Eastern Seaboard.

Forty-four states and the District of Columbia are growers of champion trees. Maryland, with 31, boasts the most champions, but California's 29 make the sunshine state a close

competitor for top honors. Oregon also is challenging the leaders with 28 top entries.

Five other states—Tennessee, Missouri, Illinois, Pennsylvania and Washington are each the homes of more than ten trees with No. 1 ranking. The 184 champions growing in the "big ten" states comprise 64 percent of the total number of biggest trees. Sharing the dubious distinction of fostering no tree champions are Minnesota, Rhode Island, North Dakota and Vermont.

A total of 121 nominators enjoy the honor of having their candidates placed at the top of the list. Champions were selected from a whopping total of more than a thousand nominations. The undisputed discovery title is held by Kendall Laughlin of Chicago who has located and reported 49 champions. Oliver V. Matthews of Salem, Oregon has nominated 28 winners and ranks as the leading challenger for Mr. Laughlin's title. In third place is F. W. Besley of Baltimore, Maryland. He has submitted 24 champions. Dr. S. Glidden Baldwin, a Danville, Illinois tree lover, has 23 leaders to his credit.

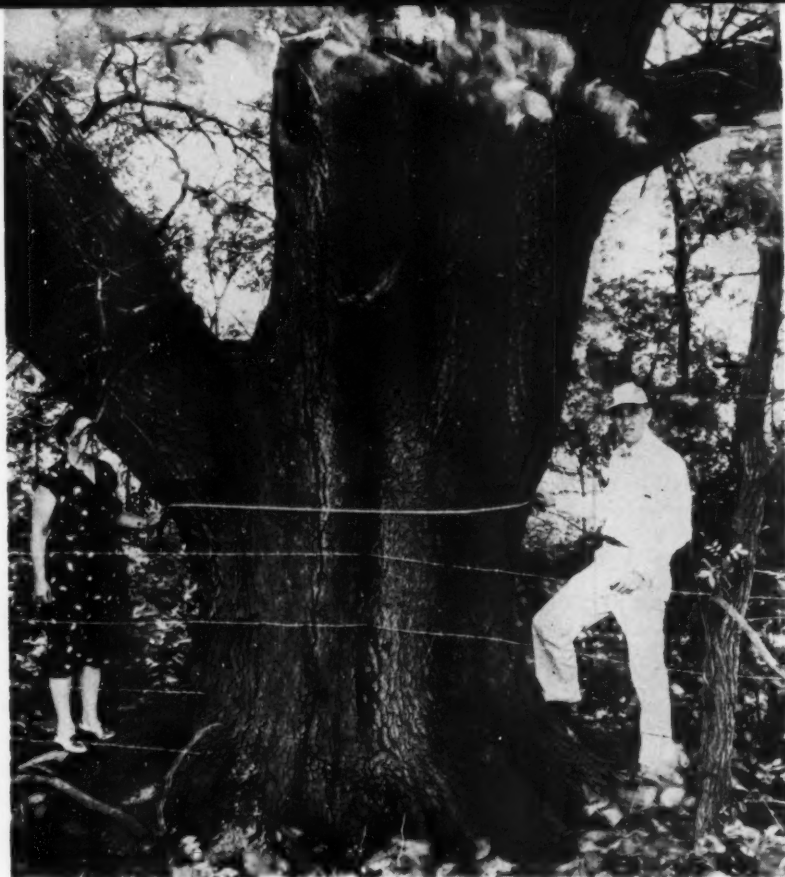
It is significant to note that these four top nominators, while having accounted for 124 (more than 43 percent) of the total of 286 champions, are not actively engaged in forestry but pursue the study of trees more as a hobby or avocation. Mr. Laughlin is a naturalist and author of a pamphlet on midwest big trees published in 1947; Mr. Matthews is a writer who has prepared bulletins on Oregon's trees; Mr. Besley, "dean of state foresters" and for 18 years a director of AFA, retired in 1942 as state forester of Maryland; and Dr.

Champion American Beech



Largest wild black cherry spreads 77 feet





This pin oak champion is located near Lawrenceville, New Jersey

Baldwin is a medical specialist, naturalist and a member of a botanical photo club.

Others who have been prominent in the campaign are H. H. Arnold, professor in the department of romance languages, Pennsylvania State College; Karl E. Pfeiffer, assistant director, Maryland Department of Forests and State Parks; T. J. Starkner, private consulting forester of Corvallis, Oregon; Ernest H. Van Fossan, judge of the Tax Court of the U. S., Washington, D. C.; and Joseph L. Stearns, assistant director of research, Timber Engineering Company, Washington, D. C., a key figure in the launching of the big tree search in 1940.

Twenty-eight nominators have reported two or more champions and 93 have reported one each.

There are all kinds and shapes of tree champions. There are the dwarf-like "flyweights" which measure less than one foot in circumference, the "middleweights" ranging upward from 50 feet in circumference and the mighty "heavyweights" with a girth of more than 100 feet.

The giant among tree giants is a titanic sequoia—the General Sherman—growing in Sequoia National Park in California. Measuring 101 feet and six inches at the base and

towering skyward 272 feet this great specimen is awe-inspiring in its enormity. It was nominated by Isabelle F. Story of Washington, D. C.

The Chechupinqua woods in Cook County, Illinois are the habitat of a champion that is a mere twig in com-

parison with the magnificent General Sherman. This buckthorn (*Rhamnus frangula*) is only seven inches in circumference and stands 12 feet high. This means the General Sherman is 174 times as big around and nearly 23 times as high as the smallest big tree. Mr. Laughlin is the nominator of the diminutive buckthorn.

Imagine a tree as tall as a football field is long. It sounds fantastic, but it's a fact. The towering monarch that proves it is the redwood (*Sequoia sempervirens*) located at Maple Creek, Humboldt County, California which has attained the tremendous height of 308 feet. Emanuel Fritz of Berkeley, California nominated this winner. He reported its circumference as 62 feet, eight inches.

The live oak (*Quercus virginiana*) doesn't take any honors in the height division but when it comes to spread it's in a class by itself. Charles Genella of New Orleans nominated this massive specimen with a spread of 168 feet. It is located near Hahnville, Louisiana, has a circumference of 35 feet and is 78 feet tall.

One of the great champions to be toppled from its throne was a Baldcypress, the Senator Overstreet, located at Longwood, Florida. The new titleholder grows in Weakley County, Tennessee and tops the Florida favorite by 14 feet in height and nearly 20 feet in circumference. The Tennessee titan is 140 feet high, 61 feet, four inches in girth, and has a spread of 50 feet. James H. Thomas of Hazel, Kentucky is the nominator.

Maryland Tuliptree is best of class



# REPORT ON AMERICAN BIG TREES

## Part I

Species	Circumference at 4½ feet	Spread	Height	Location of Tree and Nominator
<b>AILANTHUS</b>				
Tree of Heaven, <i>Ailanthus altissima</i>	17'10"	64'	82'	Cheston-on-Wye, Queen Anne County, Maryland. F. W. Besley, Baltimore.
<b>ALDER</b>				
Red, or Oregon, <i>Alnus rubra</i>	15'7"	—	—	On Nehalem River, Clatsop County, Oregon. Oliver V. Matthews, Salem.
Seaside, <i>Alnus maritima</i>	2'11"	30'	55'	Rock Creek Park, Washington, D. C. Ernest H. Van Fossan, Washington, D. C.
Sierra, or White, <i>Alnus rhombifolia</i>	9'9"	—	—	Salem, Oregon. Oliver V. Matthews, Salem.
Sitka, <i>Alnus sinuata</i>	1'2"	—	—	Saddle Mountain State Park, Clatsop County, Oregon. Oliver V. Matthews, Salem.
Speckled, <i>Alnus rugosa</i>	1'6"	15'	34'	Dunes State Park, Indiana. Kendall Laughlin, Chicago, Illinois.
<b>ARBORVITAE</b>				
Eastern, or Northern Whitecedar, <i>Thuja occidentalis</i>	15'6"	50'	125'	Natural Bridge, Virginia. F. C. Penderson (Deceased).
Giant, or Western Redcedar, <i>Thuja plicata</i>	62'8"	—	100'	Olympic National Park, Washington. F. W. Mathias, Hoquiam.
<b>ASH</b>				
American Mountain— <i>Sorbus americana</i>	5'6"	—	—	Great Smoky Mountain National Park, Tennessee. S. Glidden Baldwin, Danville, Illinois.
Black, <i>Fraxinus nigra</i>	6'	24'	37'	Billy Caldwell's Reserve, Chicago, Illinois. Kendall Laughlin, Chicago.
Blue, <i>Fraxinus quadrangulata</i>	10'3"	62'	116'	Funk's Grove, Illinois. Kendall Laughlin, Chicago.
Green, <i>Fraxinus pennsylvanica lanceolata</i>	12'2"	75'	62'	Robinson Woods, Cook County, Illinois. Kendall Laughlin, Chicago.
Oregon, <i>Fraxinus oregona</i>	18'	—	—	Near Burlington, Oregon. T. J. Starker, Corvallis.
Red, <i>Fraxinus pennsylvanica</i>	8'10"	44'	66'	Riverside Woods, Cook County, Illinois. Kendall Laughlin, Chicago.
White, <i>Fraxinus americana</i>	21'	90'	98'	Glenn Mills, Pennsylvania. S. G. Baldwin, Danville, Illinois.
Common Prickly-, <i>Zanthoxylum americanum</i>	8'4" (base)	—	30'	Homochitto National Forest, Mississippi. Herbert P. Rice, Rolling Fork.
Herculesclub Prickly-, <i>Zanthoxylum clavaherculis</i>	4'4" (base)	—	50'	Homochitto National Forest, Mississippi. Herbert P. Rice, Rolling Fork.
<b>ASPEN</b>				
Bigtooth, <i>Populus grandidentata</i>	3'10"	28'	91'	Shades State Park, Montgomery County, Indiana. Kendall Laughlin, Chicago, Illinois.
Quaking, <i>Populus tremuloides</i>	9'10"	—	76'	Cedar Mountain, Utah. James D. Curtis, Idaho City, Idaho.
<b>BALDCYPRESS</b>				
Common, <i>Taxodium distichum</i>	61'4"	50'	140'	Middle fork of Obion River, Weakley County, Tennessee. James M. Thomas, Hazel, Kentucky.
<b>BEECH</b>				
American, <i>Fagus grandifolia</i>	16'7"	80'	75'	Near Morrisville, Pennsylvania. Paul H. Fluck, Lambertville, New Jersey.
Carolina, <i>Fagus grandifolia caroliniana</i>	12'10"	—	126'	West Feliciana Parish, Louisiana. Lazella Schwarten, Jamaica Plain, Massachusetts.
<b>BIRCH</b>				
Gray, <i>Betula populifolia</i>	4'3"	31'	58'	Near Catonsville, Maryland. F. W. Besley, Baltimore.
Paper, or White, <i>Betula papyrifera</i>	18'	—	—	Hog Back Mountain, East Northfield, Massachusetts. William Wharton, Groton.
River, or Red, <i>Betula nigra</i>	12'4" (at 2½')	—	—	Rock Creek Park, Washington, D. C. Ernest H. Van Fossan, Washington, D. C.
Sweet, or Black, <i>Betula lenta</i>	10'10"	60'	60'	Great Smoky Mountain National Park, Tennessee. S. Glidden Baldwin, Danville, Illinois.
Water, <i>Betula fontinalis</i>	1'10"	—	—	Near Warm Springs River, Wasco County, Oregon. Oliver V. Matthews, Salem.
Yellow, <i>Betula lutea</i>	14'1"	64'	90'	Great Smoky Mountain National Park, Tennessee. S. Glidden Baldwin, Danville, Illinois.
<b>BLUEBERRY</b>				
Tree Sparkleberry, <i>Vaccinium arboreum</i>	1'4"	13'	15'	Burnham Mountain, Glenwood, Arkansas. Kendall Laughlin, Chicago, Illinois.
<b>BOXELDER</b>				
<i>Acer negundo</i>	19'11"	102'	75'	White Plains, New York. George H. White, Kent, Ohio.

(Turn to page 26)

## Big Tree Report (Continued)

Species	Circumference at 4½ feet	Spread	Height	Location of Tree and Nominator
<b>BUCKEYE: HORSECHESTNUT</b>				
California, <i>Aesculus californica</i>	12'9"	40'	35'	Olema, California. R. H. Menzies, San Francisco.
Common, <i>Aesculus hippocastanum</i>	12'6"	63'	63'	Near Cumberland, Maryland. Karl E. Pfeiffer, Annapolis.
Ohio, <i>Aesculus glabra</i>	8'1"	60'	90'	Elyria, Ohio. O. E. Files, Toledo.
Yellow, <i>Aesculus octandra</i>	15'11"	54'	85'	Great Smoky Mountain National Park, Tennessee. S. Glidden Baldwin, Danville, Illinois.
<b>BUCKTHORN</b>				
Carolina, <i>Rhamnus caroliniana</i>	9"	----	----	Gatlinburg, Tennessee. S. Glidden Baldwin, Danville, Illinois.
Cascara, <i>Rhamnus purshiana</i>	9'5"	----	60'	Near Rockport, Washington. T. J. Starker, Corvallis, Oregon.
Common, <i>Rhamnus cathartica</i>	4'6"	34'	32'	Pennsylvania State College, Pennsylvania. H. H. Arnold, State College.
Glossy, <i>Rhamnus frangula</i>	7"	9'	12'	Chechupinqua Woods, Cook County, Illinois. Kendall Laughlin.
<b>BUMELIA</b>				
Buckthorn, <i>Bumelia lycioides</i>	3'7"	30'	40'	Near Vulcan, Missouri. George O. White, Jefferson City.
Gum, <i>Bumelia lanuginosa</i>	2'8"	23'	26'	Meramec State Park, Missouri. Kendall Laughlin, Chicago, Illinois.
<b>BUTTERNUT; WHITE WALNUT</b>				
<i>Juglans cinerea</i>	9'	70'	110'	Grover, Taylor County, Wisconsin. Ralph C. Bangsburg, Perkinstown.
<b>BUTTONBUSH</b>				
Common, <i>Cephalanthus occidentalis</i>	1'8"	16'	12'	Near Lisle, Illinois. Kendall Laughlin, Chicago.
<b>CATALPA</b>				
Northern, <i>Catalpa speciosa</i>	17'10"	73'	58'	Near Ellicott City, Maryland. F. W. Besley, Baltimore.
<b>CEANOTHUS</b>				
Blueblossom, <i>Ceanothus thyrsiflorus</i>	3'3"	----	----	Near Riverton, Oregon. Oliver V. Matthews, Salem.
Snowbrush, Sticky laurel, or Mountain Balm, <i>Ceanothus velutinus</i>	2'5" (at 32")	18'	28'	Near Oregon City, Oregon. Oliver V. Matthews, Salem.
<b>CEDAR</b>				
Eastern Red— <i>Juniperus virginiana</i>	13'4"	42'	62'	Cumberstone, Queen Anne County, Maryland. F. W. Besley, Baltimore.
California Incease-, <i>Libocedrus decurrens</i>	36'	----	----	Rogue River National Forest, California. Oliver V. Matthews, Salem, Oregon.
<b>CHERRY</b>				
Bitter, <i>Prunus emarginata</i>	5'5"	----	----	Near Crown Point, Oregon. Oliver V. Matthews, Salem.
Black, <i>Prunus serotina</i>	18'4"	77'	64'	Near Worton, Maryland. F. W. Besley, Baltimore.
Carolina Laurel— <i>Prunus caroliniana</i>	9'10"	48'	55'	Near Eutawville, South Carolina. F. K. Bull, Pinopolis.
Pin, <i>Prunus pennsylvanica</i>	4'7"	20'	70'	Great Smoky Mountain National Park, Tennessee. S. Glidden Baldwin, Danville, Illinois.
Western Common Choke-, <i>Prunus virginiana demissa</i>	2'10"	----	----	Near Yamhill, Oregon. Oliver V. Matthews, Salem.
<b>CHINABERRY</b>				
<i>Melia azedarach</i>	10'2"	63'	40'	Near Wade, North Carolina. Harold B. Stabler, Washington, D. C.
<b>CHINKAPIN</b>				
Giant Evergreen-, or Western, <i>Castanopsis chrysophylla</i>	15'3"	----	127'	Near Annapolis, California. Arnold F. Wallen, Santa Rosa.
Ozark, <i>Castanea ozarkensis</i>	9'8"	45'	60'	Near Freck, Arkansas. Howard A. Howell, Little Rock.
<b>COFFEETREE</b>				
Kentucky, <i>Gymnocladus dioica</i>	12'6"	75'	75'	Near Madison, Ohio. Newton G. Armstrong, Cleveland.
<b>CRABAPPLE</b>				
Lanceleaf, <i>Malus lancifolia</i>	1'7"	17'	21'	Mt. Washington Cemetery Woods, Jackson County, Missouri. Kendall Laughlin, Chicago, Illinois.
Oregon, or Western, <i>Malus fusca</i>	5'4"	----	----	On the Nehalem River, Clatsop County, Oregon. Oliver V. Matthews, Salem.
Prairie, <i>Malus ioensis</i>	2'6"	15'	28'	Swope Park, Kansas City, Missouri. Kendall Laughlin, Chicago, Illinois.

(To be continued in next issue)



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# Ten Rivers — Sick and Well

In its second volume, the President's Water Resources Policy Commission presents facts on "Ten Rivers in America's Future"

THE second volume in the series of reports by the President's Water Resources Policy Commission, "Ten Rivers In America's Future," published at the end of February, deals with five river basins in the west—the Columbia, Central Valley of California, Missouri, Colorado, and Rio Grande; and five in the east—the Connecticut, Alabama-Coosa, Potomac, Ohio, and Tennessee.

Less sensational than its predecessor, "A Water Policy for the American People" (reviewed in the February, 1951 issue of *American Forests*), it supplies the facts on which the Commission's policy recommendations were based. All essential data on the water and land problems of the ten basins are presented in a book almost as thick as the Manhattan telephone directory.

Since "Ten Rivers In America's Future" was prepared by the Commission's working staff, almost all of whom are bureaucrats, the volume lacks some of the incisiveness we had come to expect of the Commission. It does not point a finger at the federal agencies which have helped to mess up some of our river basins by building unwise multipurpose projects; nor does it reject some of the more preposterous plans which these same bureaus have persuaded Congress to authorize for future construction. On the whole, the Commission seems to have feared stepping on any agency's toes and to have largely ignored political realities. The result is a textbookish volume.

Water problems hold the key to the prosperity of the West, says the Commission. "Here water is a precious commodity. Its presence or its absence determines the extent of agriculture and industry, and the distribution of our people."

The five western basins studied have different problems. In the Columbia Valley, we have abundant untapped water resources. Here the federal government has assumed the

By ANTHONY NETBOY

major responsibility for developing the power resources of the big rivers, and for building huge irrigation projects (at relatively high cost), but the Commission admits the program is out of balance. The important fishery resources have not only been neglected, but impaired by the high dams that prevent the precious salmon from reaching their spawning grounds. The Commission points up the splendid opportunities in this vast region for getting more hydro power, reclaiming more land for agriculture, improving navigation on the Columbia and building a base for more people, farming, and industry.

In the Missouri Valley, water resources pose very intricate problems. Upstream interests want water for irrigating farmland, while downstream interests want a navigable channel on the Missouri River. Although much money is being poured into this region for dam building by the federal government, relatively little is being done to rehabilitate the abused wa-

tershed. Even basic information on which to make decisions is lacking. There is no integrated program "to provide greater economic and social stability in areas which have experienced serious (economic) fluctuations in the past. This basin, because of its size and diversity, will continue to be a severe test for those responsible for its development."

In the Central Valley of California, one of the richest farming regions in the world, the cry is for more water for irrigation. This area has been an inferno of conflict between government agencies and between local interests and the Bureau of Reclamation in particular. Every acre of irrigated land is fought for, and the 160-acre limit on land made available by the federal government has been bitterly fought. Additional electric energy is also needed in the Central Valley and the adjoining San Francisco Bay area.

The Rio Grande is one of the sickest river basins in the country. This arid region has been long overgrazed and the farms are split up into too-small units. Here the Malthusian principle may be seen at work: there are more people on the land than the land can support. Rural poverty is shocking. The Rio Grande and its tributaries are loaded with silt when the waterways are full, and sedimentation has already cut into the capacity of reservoirs and ruined irrigation ditches. Much land adjoining the river has been waterlogged.

The Colorado River basin is rife with water problems, despite vast expenditures on water projects by the federal government. Of major importance "is the progress made in attacking the broad aspects of distribution of available waters through interstate compacts." The states of California, Utah, Arizona, Nevada, New Mexico, Colorado, and Wyoming are fighting for Colorado water for their homes, industries, and farms. Yet the watershed, its cover subjected to heavy grazing for dec-

(Turn to page 38)

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THE FULL REPORTS of the President's Water Resources Policy Commission may be purchased from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

*A Water Policy for the American People*, Volume I, 445 pages illustrated, is priced at \$3.25; *Ten Rivers in America's Future*, Volume II, 801 pages illustrated, \$6; *Water Resources Law*, Volume III, 777 pages, \$2.25; and *A Water Policy for the American People—Summary of Recommendations*, 18 pages, 15 cents.

Each of the ten river reports may also be obtained separately as follows: Columbia River, 55 cents; Central Valley of California, 70 cents; Missouri, \$1; Rio Grande, 60 cents; Colorado, \$1; Connecticut, 60 cents; Alabama-Coosa, 50 cents; Potomac, 50 cents; Ohio, 75 cents; and Tennessee, 65 cents.

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## Davy and the Bear

(From page 15)

all close shaves that made them hunger for fire and thirst for blankets. When he was a judge he invented the famous system of sobering drunkards up for life by picketing one with a long chain to a stump, and a bear with a shorter chain to the same stump. Then the bear would run the sot in circles till he was sober and more than ready to sign the pledge.

"Uncle Roarious always got the camp-meeting vote until the night little Davy, who had just turned ten, let all the bears into the flour mill and stampeded them, grabbing the tail-end bear for a wild ride. It was a night of full moon. A great camp meeting was rising to high pitch in a brush arbor when the pack of bears, all ghastly white, stampeded through. Then the pursuing yells of Uncle Roarious thundered down. A preacher shouted, 'It's Gabe's trump ye hear and the dead have riz!' The meeting joined the shout until the last bear came on, with little Davy Crockett astraddle him. That was the end of the camp-meeting vote for Uncle Roarious.

"Such was the kind of bringing-up Davy Crockett had until he was high in his teens and out West in the Seven Devils country, looking for the golden bear of the Indian tales.

"Dave came on his first golden bear, son of giants, when he was up in the lake lands of the Seven Devils. Should say, the bear came on him. Davy had been spying for deer all day long, no luck till nightfall, then he came on a bony old buck that had more scars than hair, a goat beard, and a skull from which the eyes looked like two bullet holes in a stump. Davy Crockett just stood and looked, not bothering to take Killdevil, his rifle, off his shoulder for such poor meat. Then the ground shook, the brush threshed, a roar curdled his gizzard juice, and with it all Davy saw the hugest sight of a bear of all his days coming on the yonder side of the buck.

"The bear shone like gold. It shone brighter than the glittering sun. But it was a bear, a golden bear. It jumped clear over the buck and came for young Davy Crockett with a roar.

"Young Davy brought Killdevil down then, of course, and pumped a rifle ball a-sizzling smack through the great golden bear's heart. The bear came right on, roaring. Now he really was mad, so mad that when

(Turn to page 32)

## GREEN FORESTS

maintain water supplies



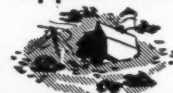
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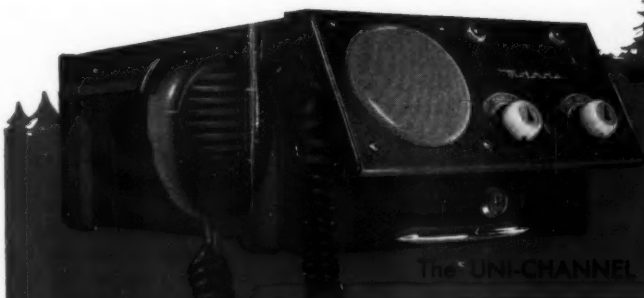


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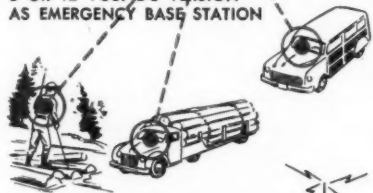
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## Davy and the Bear

(From page 30)

he took a swing at Davy it was in a frothing rage—and when Davy neatly ducked the wild blow the bear's paw came back and clouted his own nose! Blood poured and tears streamed. The bear flailed at Davy again and again. Davy Crockett bobbed his head under all. He did some lightning work as he bobbed, reloading Killdevil. When he piped another ball into the bear's heart, the bear truly did lose his temper. He swung so hard at Davy that when he missed he knocked himself into the lake.

"Davy Crockett went after that bear like a panther after catfish. He knew just what to do, for he knew bear nature and he knew the strength of the steel in Killdevil's barrel. So he dived for the bear to bring the rifle barrel crosswise on the back of the golden critter's neck. And right according to his reckoning, the bear fetched up both forepaws in a frenzy to clutch the barrel, left paw on the muzzle, right paw on the firing chamber. And then the bear hauled and tugged like the old son of wrath himself on that rifle barrel—and with every pull he dragged neck and head deeper under until he finally choked his own life out in the bottom mud of the lake.

"That golden bear pulled so hard that he broke a leg—three feet below the knee. He didn't know any better. He was only a cub of the golden bears.

"Davy Crockett got that straight when a ma bear came storming along on the track of the drowned bear. Davy had just waded out of the lake when up she stormed, a bear that *was* a bear. Young Davy crouched back and thought so fast that his skull sizzled from cowlicks to nape. He thought of dodging until he could load up and shoot. He thought of whipping out his blade and trying to cut ma bear's throat or hamstringing her, but both thoughts wilted as she loomed nigh, elephant high, a-roaring and a-snorting.

"A third fast thought, and the nephew of Uncle Roarious Crockett, the bear tamer, knew just the thing to do. While the ma bear was still coming on all fours Davy lit out on a run for her; he swung Killdevil up, over and down, then threw himself aloft, using the rifle as a vaulting pole—and over ma bear's head he arched, to come down in the hair of her back.

Davy grabbed hair with his left hand and with his right slung Killdevil by its strap over his shoulder. Ma bear wheeled and lit out on a wild-eyed gallop. She growled and she foamed at every jump. She made tracks for the peak of He Devil where she kept her lair.

"It might have been that she had her wits and figured to tote young Davy to her cave and feed on him there from buttons to bones. Davy didn't know what she had in mind. Anyhow he had no room for any worry outside what he used for hanging on. And hang on he did all the way up to He Devil's peak.

"Davy Crockett never knew what the ma bear had in mind to do with him. She hit a ledge too hard and it broke off under her into a thousand feet of slide rock. The entire slope sheered away for a full mile and a half into the Hell's Canyon of the Snake River. It appeared that the great golden bear had slid its length before, maybe many times, the way she took right to it. Davy began to feel like a bug on her back as she laid back on her haunches and sailed ahead in the middle of an avalanche.

"Young Davy had never in his life been on such a trip and there was no chance for a stopover on this one. So he made up his mind to enjoy it and take in the scenery while he could. He sat up, held on, looked sharp, cocked both ears and missed nothing.

"They lit like thunder in the boiling river. Davy clamped his jaws and held his breath and simply hung on as the bear rode the avalanche to rock bottom. She came up swimming to the roar of the river. Along in the white water she gave a long look back at Davy Crockett which said as plain as day, 'You're boss, I reckon.' And then in peace and good will the great golden bear carried Davy Crockett on down the snorting Snake to the Columbia River country. There he let her go back home with a promise he'd never again hunt for golden bear in the Seven Devils. They were too noble to hunt, he said. And that promise he did devoutly keep."

Uncle Ben Cotter didn't say any more. Nobody else did, either. Pretty soon Uncle Ben got up and mos-eyed off to bed. We had bear meat for another week before Uncle Ben got a deer. I still don't see why, but there were no more complaints.

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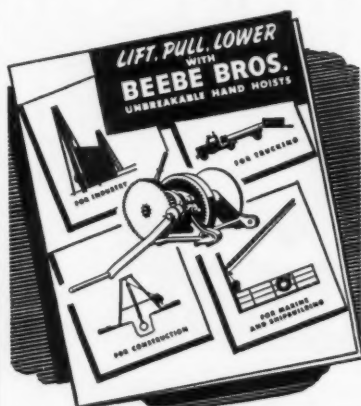
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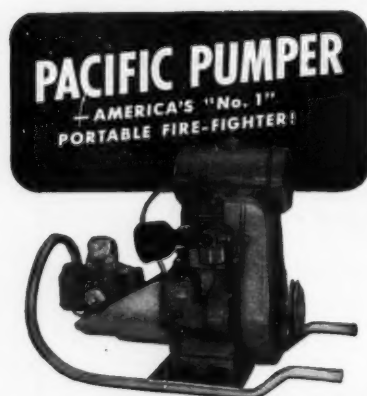
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## Camp Cookery

(From page 11)

verse the bird to hang by the neck.

Another method of roasting birds, using the same arrangement, is to cover them with a paste crust made from a cup of flour and a little cold water. Mix the paste to a thick consistency and cover the bird with a quarter-inch layer. Before applying the paste, place a piece of bacon under each leg and wing. This bastes the bird, keeping the meat tender and moist as the paste keeps in all the steam.

If you are in country where there is clay near at hand, here is an easy method of baking wild birds. Draw the entrails but leave the feathers on. Wash the fowl and rub the inside with salt. Next, on a sheet of paper or bark, place a layer of clay and lay the bird on it. Now pack clay all around the bird to a depth of about three inches. Place the whole thing on the coals of a fire and heap more coals over it. As the coals burn away to ash replace with more, keeping the process up for about an hour. Then remove the bird and break off the clay. The feathers and skin will stick to the clay leaving the meat clean. Season the fowl with salt and pepper. The meat will taste all the better for having eliminated the distasteful task of picking feathers.

These are but a few of the methods by which the camper can have a well rounded diet. A little ingenuity will show the camp cook many more labor saving devices, as well as give the whole camp a welcome relief from the overworked frying pan.

## Tree Farm Parks

(From page 21)

number of hunters, fishermen, picnickers and other miscellaneous users of privately owned tree farm lands are fast becoming a major public relations problem for companies engaged in long-range forestry programs. This traffic, if unrestricted, can be a terrible menace to large forest areas during dangerous fire seasons. At the same time, exclusion of the public is not justified for public relations reasons.

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(Turn to page 38)

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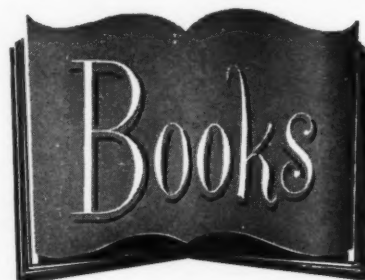
- June 4-15—Pecos Wilderness, Santa Fe National Forest, New Mexico—\$205 from Santa Fe
- July 5-16—Flathead-Sun River Wilderness, Flathead and Lewis and Clark National Forests, Montana—\$175 from Missoula
- July 10-19—Quetico-Superior canoe trip, Minnesota and the Canadian border—\$170 from Ely, Minn.
- July 16-27—Flathead-Sun River Wilderness, Flathead and Lewis and Clark National Forests, Montana—\$175 from Missoula
- July 22-31—Quetico-Superior canoe trip, Minnesota and the Canadian border—\$170 from Ely, Minn.
- July 24-August 2—Maroon Bells-Snowmass Wilderness, White River National Forest, Colorado—\$190 from Aspen
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- August 7-16—Maroon Bells-Snowmass Wilderness, White River National Forest, Colorado—\$190 from Aspen
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**The Living Soil**, by E. B. Balfour.  
Published by The Devin-Adair Company, New York City. 270 pages, illus. Price \$4.

Nine printings of Lady Balfour's *The Living Soil* have been published in England since it was first brought out in 1943; it is now established as a scientific classic in soil biology and fertility relationships. This edition, the first published in the United States, is completely revised and up to date. The book is a summary of certain recent scientific research on nutrition and soil fertility, including results obtained in many different parts of the world by practical application of the principles involved. It is a foundation stone for an agricultural library. Lady Balfour has written in such a manner as to appeal both to the specialist and the layman.

**An Introduction to American Forestry** (new second edition), by Shirley Walter Allen. Published by McGraw-Hill Company, Inc., New York City. 413 pages, illus. Price \$4.50.

While preserving the essential order and background material, a second edition of this well-known college text has been moderately revised to incorporate the changing techniques and policies of American forestry. The treatment of forest planting has been considerably developed, featuring changes from old hand methods to machines. Mechanization and organization of logging and other timber harvesting receives special attention. Material on the protection of the forest from fire, insects, dis-



ease, and storm has been carefully revised. Also, the discussion of forest policy has been brought up to date to include significant changes in the past ten years in the fields of private and state forestry.

**Out of the Earth**, by Louis Bromfield. Published by Harper & Brothers, New York City. 305 pages, illus. Price \$4.

This book concerns the "new agriculture" and the incredible worlds which have opened up with the scientific discoveries of the past few years. This well-known author writes that it is probable "that we have learned more about agriculture and the soil in the past generation or less than in all the history of the world."

It is also probable, he writes, that what we have discovered up to date is only about one tenth of what there is to know.

Bromfield's book is based largely on the observation, research and experiments of more than ten years at his own Malabar Farm. He concludes that the "new agriculture" offers a way to bring to millions of people new dignity, prosperity and meaning in their lives.

## Lookout

(From page 5)

with the PMA program payments may be given farm woodland owners who comply with specified forestry practices as proposed by the two federal agencies. The less inclusive program of the Production and Marketing Administration during the past fiscal year accomplished the planting of 95,573 acres to forest trees and shrubs, plus such diverse conservation practices as seeding, liming, contour strip-cropping and dam building conducted on 2,588,000 farms.

That these transfer and consolidating actions are only a beginning is indicated by the clause that they will apply "to the extent possible under present law or future amendments thereof." The Assistant Secretary in charge of the agricultural resources conservation services is directed to initiate and "maintain a continuous survey of the agricultural resources activities of the Department and to determine with the Secretary such action, including transfers of functions, as may be necessary and appropriate to insure integration, effectiveness and economy of the functions assigned to him."

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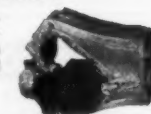
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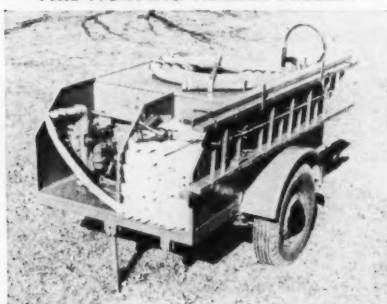
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## Tree Farm Parks

(From page 34)

people must be accommodated to an extent compatible with adequate fire protection and the free flow of log truck traffic and timber harvesting operations. During hunting season, for instance, when hordes of gunhappy nimrods pour out from the cities, Weyerhaeuser cooperates by allowing access to designated areas under certain fire-protection regulations, usually under a permit system. Bagged game is hauled out to an unloading station over the company's privately-built logging roads, on company trucks, to prevent accidents to private vehicles from the big logging trucks. In many other ways, the company is allowing hunters to use tree farm lands under regulated use.

Such policies cost considerable money and are a long time investment in public good will, which may pay off in better fire protection. Cooperation of the public can be a tremendous help in reducing man-caused fires, as proved by the 1950 record of the Keep Washington and Oregon Green programs. In the years to come, the private forest industry is almost certain to implement its public relations programs by providing more facilities for public enjoyment of tree farm lands. Timber can be more than a sawlog crop, according to the new thinking.

## Ten Rivers

(From page 28)

ades, is in bad shape. And little is being done to restore the land—a staggering undertaking. For the Colorado, as for the other nine river basins, the Commission enunciates a carefully articulated plan of water and land development.

The East is just beginning to wake up to its water resource potentials. "Because of its abundance, water has generally been taken for granted by the people of the East. Water rights and water allocation problems have not often arisen to complicate development activities. Undeveloped water has been very nearly a free good. In fact, the main problem in recent years has been that of devising protection against too much water in periods of flood."

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other basins to obtain lower electric rates, improved rural life, further industrial development, usable navigation channels and greater opportunities for outdoor recreation."

In the case of the Connecticut River basin, the Commission shows that multiple-purpose projects would be of great benefit to New England by providing more power for industry and better flood protection as well as abatement of pollution. Also, watershed management programs are needed to prevent further land deterioration. A great problem, however, would be the loss of valuable land that would be flooded out if big dams were built.

In the Potomac watershed, the Commission endorses the Army's expensive plan for turning the lower Potomac into a series of lakes by building huge dams in the vicinity of Washington—a plan that had to be abandoned in 1944 because of protests by local interests. The Commission's arguments for the Army's

### No Cutting In Our Parks

A misleading caption on page 8 of *New Roads to Timber Plenty* (March issue) has been construed by some readers to indicate *American Forests* advocates cutting timber in Olympic National Park. It was not intended to convey such an impression.

scheme are still not convincing to those who do not want to see the scenic Potomac ruined by throwing dams across the river and flooding permanently many thousands of acres of good farmland.

For the Ohio River basin the Commission endorses the building of several multiple-purpose projects to reduce floods and generate hydro power—all probably sound. In the Alabama-Coosa basin, the problem is one of "coordinated development of a group of rivers into a single program" to benefit an impoverished population whose farmlands and forests have been overused and depleted.

The volume ends with the accomplishments of TVA and an outline of further resource-development needs in the Tennessee Valley. It is interesting to note that, although the Commission regards TVA as a model water-resource agency, it does not call for the creation of other valley authorities. It does not even endorse President Truman's pet project for the Pacific Northwest—a Columbia Valley Administration modeled basically on TVA.



## ONE-MAN CHAIN SAW

Undisputed champ of the woods at 35 pounds — complete with attachments! The brand new SUPER PIONEER presents advanced engineering that comes only with long experience in the field combined with modern manufacturing facilities.

Rugged-built to take felling and bucking in heavy timber, the SUPER PIONEER one-man model is equally at home where its light weight and flexibility pay off: for tree surgery, pruning, limbing, construction work and a hundred other uses in the woods, on the farm—anywhere!

New features you'll want are: kick-proof starter, stop switch, bar lengths to 36", built-in chain oiler, full 360-degree swivel bar, increased horsepower, automatic self-energizing clutch, new concentric float carburetor, new chain tightener—features that give you "more time in the woods"!

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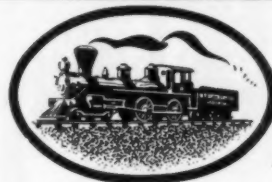


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CHAPMAN

ALABAMA





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### The MUSKINGUM Story

Twenty-two years ago the people of eastern Ohio initiated a notable experiment in flood control and soil and water conservation. Theirs was a bold and challenging concept of public self-service. Based on the conviction they had the know-how to try something new in watershed development, their project called for patient and wise leadership, faith in the valley people and the pioneer's determination to overcome all obstacles. Today much of this program is a reality. In a little over a decade and a half the Muskingum Watershed Conservancy District, has been the guiding hand in the completion of a fifty-million-dollar flood control project.

The American Forestry Association believes that the Muskingum project is a sound solution to America's problems of flood control and watershed management. It believes that this type of project can be developed on many watersheds of the nation. To encourage a further study of the Ohio project with a view to its application in other states and communities, The American Forestry Association is proud to present "The Muskingum Story."

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47 WARREN ST. NEW YORK (7) N. Y.

## Smokey Campaign

(From page 10)

and attractive designs utilizing eye appeal, human interest angles, and other "gimmicks" for attracting public attention.

Several basic principles of advertising have been employed successfully in the Campaign. One of the first recommended by the advertising experts was the development and constant use of an identifying slogan or tag line for all materials. After much study the slogan, "Remember, Only You Can Prevent Forest Fires," was adopted. The experts pointed out that this slogan contained several important elements. It puts forest fire prevention on a personal basis, and it intrigues the interest of each individual to analyze how he or she can do something about forest fire.

From the beginning, the advertisers urged the establishment of a symbol which would be readily identified by the public as representing the need to prevent forest fires. Several were tried out but didn't seem to click. In 1944 the Council enlisted the cooperation of the Walt Disney Studios in producing a special supporting poster for the Campaign. Disney used his deer character "Bambi," made famous by a movie of the same name.

This proved one of the most popular posters, and a lot of thought was given to the advisability of using Bambi as a symbol. However, two main difficulties prevented this: (1) it was hard to visualize a deer fighting fire or doing many other things that a forest hero for the program would have to do; (2) Bambi was copyrighted by Disney Studios—which would necessarily restrict use of the character.

Following up public interest and response to the animal theme, in 1945 Albert Staehle, well-known cover artist for the *Saturday Evening Post* and an expert in animal art was commissioned to do a special poster. He produced with a bear cub, wearing Levi's and a forest ranger's hat which looked like the answer to the symbol problem. However, a name was needed. R. F. Hammatt, director of the Campaign for state and federal forest services at that time, called a huddle with Council and Agency officials and they came up with the name of Smokey. It was a takeoff on Smokey Joe Ryan, a famous New York City fire chief.

From then on Smokey became the



permanent standard bearer, and was gradually worked into the basic theme each year, rather than being used as the supporting poster.

In developing Smokey as a permanent symbol, Stuart Peabody, advertising manager of the Borden Milk Company, originator of "Elsie," the Borden cow, and an Advertising Council director, has been exceedingly helpful. He suggested the use of a live Smokey whenever possible, and this was realized in 1950 when the little bear cub was rescued from a forest fire in New Mexico.

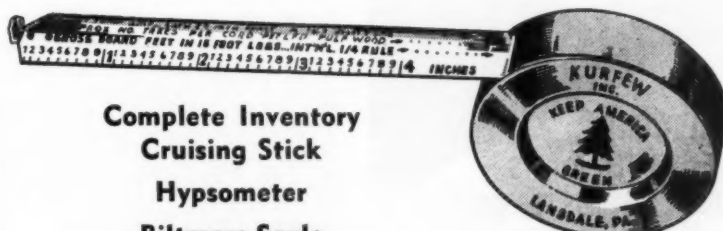
Through the cooperation of the New Mexico Game & Fish Commission, the cub was named Smokey. He was flown to Washington in a special plane and presented to the National Zoo as an outstanding example of the need for preventing forest fires. From the story of the little bear, the "idea boys" developed the 1951 Campaign theme which features Smokey as the protector of forests and wildlife, leading two bear cubs away from a burned-out forest area.

Advertisers depend a great deal on public opinion surveys, product recognition, and other methods of spot checking the effect of their work. In 1948, just as the poster Smokey was beginning to be nationally well known, the Psychological Research Corporation conducted, as a public service, a Smokey Bear recognition test. Samplings were made in 138 cities and towns by contacting 2500 people.

The research analysts showed only a photograph of Smokey without name or other identification and asked each person if he recognized this character. Eighteen percent of the people contacted knew Smokey's name and his job; a much larger percentage knew he had something to do with forests or parks but didn't know his name. As a result of this survey, the advertisers recommended using Smokey's name on either his hat or his belt buckle. This practice is now being followed and another survey will be conducted within the next few years.

The impact of this mass public service advertising has had a profound effect on public opinion. It has proved to be the rallying point of all groups, organizations, and individuals working in the interest of reducing man-caused forest fires and protecting our forest, range, and watershed resources from destruction by forest fire. As Smokey Bear would put it, "Folks are remembering to prevent forest fires."

## **NEW! PRACTICAL! CONVENIENT!**



**Complete Inventory  
Cruising Stick  
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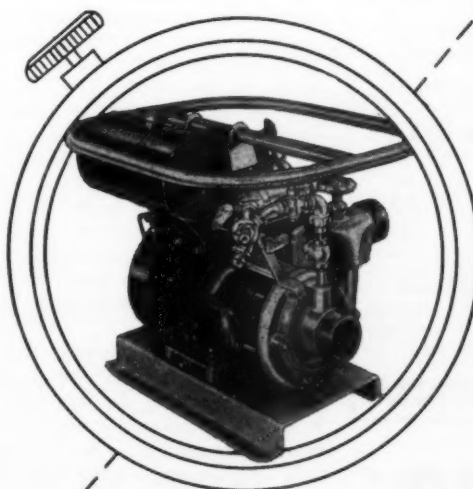
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Will deliver up to 300 GPM to booster tank or direct to pump suction from sources inaccessible to or beyond the suction lift limit of motorized apparatus.

Automatic prime—easy to start. Weighs only 125 lbs.

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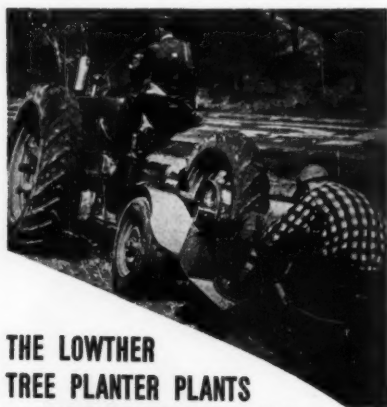
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25 for  
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**HARTWOOD FORESTS**  
9 T Linden Place Summit, N. J.

## Honeymoon Lookout

(From page 17)

needles. The 50 pounds of goat chow we bought for her lasted the season, and she gave two quarts of milk daily. No one on the lookout had tried our experiment before, and Butch now seems inclined to advise the powdered preparation, but I am a hard loser. If Fly Peak sees us again, it will see Katie, too.

We would advise a few laying hens, for you can have fresh eggs and be an "Egg and I" girl. If your hens lay down on the job, you can have "Chicken Every Sunday."

Since it is impossible to get fresh meat, you must take a sizable amount of canned meat. You will want plenty of hot cake flour, for you acquire a terrific appetite living on a peak. Beans and potatoes are staples you will need. Popcorn and candy help make the long nights pass swiftly.

From morning until night, there is never a dull moment if you will it that way. Every 15 minutes you must carefully scan the forest over which you watch for smoke. You scrutinize it especially cautiously after a lightning storm, for of the 57 fires in our forest, all but half a dozen of them were caused by lightning.

Within 15 minutes after you have noted a fire, you must phone the dispatcher with specific information. You must give him the location, placing the fire as near landmarks noted on the maps as possible; for instance, the closest creek or the peak upon which the fire burns. You must give him the azimuth reading. This is a reading in degrees which you locate on your range finder, a rotating instrument in the middle of the lookout through which you sight your fire. Then you report the range, township and section the fire is in, the size of the blaze, and approximate number of air miles you judge it to be from your station.

The dispatcher will then call the other lookouts in your vicinity for a cross reading. If the fire warrants it, and its location is in thick timber almost inaccessible by foot or horseback, the dispatcher will summon the smokejumpers.

On two fires we reported, the planes dropped jumpers. Butch would stay at the phone, reporting on the successful opening of parachutes and parachuted equipment while I remained outside on the catwalk keeping field glasses focused on the plane.

## 20 Million Trees a year



Seedlings for Forest and Christmas Tree Plantings. Complete line. As low as \$16.00 per 1,000.

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For special Xmas Tree Growers' Guide, and complete Planting Sheet

Price List. Write Box 27-D.

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FOR XMAS TREES & FORESTRY  
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## TREES FOR FOREST PLANTING PINE+SPRUCE

Firs, Arborvitae and Other Conifers. We raise all our trees in our own nurseries.  
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Hundreds of Redwoods now grow, many states, some 100 years old—list in **FREE** booklet. Some climates good for all 15 species—some for only a few. Six now ready—all 15 soon. Sizes \$3.00 to \$10.00 each, pot-grown with ALL roots. Mail \$1.00 for 64 pages. "How To Grow in your climate"—small booklet **FREE.**

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Norway Spruce, Red Pine, White Pine, Scotch Pine, White Spruce, Black Hill Spruce, etc. Prices are reasonable and the trees are **GUARANTEED TO LIVE.**

**WESTERN MAINE FOREST NURSERY COMPANY**  
Dept. F. Fryburg, Maine

You will thrill at the teamwork and harmony with which every detail of conserving Uncle Sam's forest is handled. You will be proud to be a part of such a vast scheme. We would watch the elk and deer passing in the timber below us, and a sense of pleasure would be ours to know we were helping save their lives and their forest homes.

I misconstrued the intentions of our outdoor emergency water barrels. I proceeded to use the contents to wash clothes. One day Butch approached me with a frowning countenance.

"Would you believe it?" he asked. "The water that was in the barrels out front has all evaporated. How would we put out a fire here on the peak?"

"Is that what the water was for?" I countered.

"What else?" he questioned. "Did you think it was to wash clothes?"

On the peak, your husband will work five days of the week; if the fire hazard is great, you will work two—those weekends when you must take over as relief worker. You will help out much more often than this during the week because you want to aid your better half. Our summer proved a hazardous one, and the women were employed every weekend in our forest until the end of the season. Your husband makes around \$9.50 a day, and you make approximately \$8.80 each day you work as relief man.

If your husband is called to fight a fire in your vicinity, you go on top to watch for fires and your salary goes on while he is also being paid for fire fighting.

That phone line provides one of your main sources of entertainment. In the evening, when the long day of watching is in—for your day opens with a check-in with the dispatcher at 7 a.m. and a check-out at 4:30 p.m.—all the lookouts in your vicinity get on the phone. It is a thrill to hear your neighbors, some hundreds of miles away. The stories and mouth harmonica concerts were great fun, and sometimes in the excitement, seven or eight voices would be speaking at once.

Is it necessary to take a course to be a lookout? No, there is no degree or certification necessary for the work. Your forest ranger, or one of the officials, will take you to your peak and introduce you to the necessary methods of procedure.

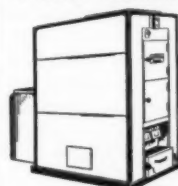
Naturally you may not be one hundred percent accurate in gauging your fires during your season of service. Everyone makes a mistake, even the experienced hands. But the wise dispatcher, in our case Lloyd Sammons, better known as "Steelhead," calculates the readings of all the lookouts that can view the fire, and if you are a few hundred yards off, the location of the fire is still estimable.

Often a lookout will imagine a fire. One of the boys stared so long at heat waves that he was convinced he was seeing smoke. Sometimes clouds and fog will look like the real thing. I turned in two fires that were merely steam rising up from hot springs after a storm, when the air had cooled and the hot vapor climbed skyward. But you learn from your mistakes, and the forest department is patient. They would rather have you turn in a few bogus fires than let a real fire get started.

Now are you wondering if there are any disadvantages? Yes, there are a few minor ones, as in every field of work you enter, but they are so far outnumbered by the advantages, that as I look back on them, they are nil. Were I to ask Butch, he would reply: "There are none!" But for the accuracy of the report, here they are. Note, men, that they are strictly viewed from the woman's point of view.

(Turn to page 44)

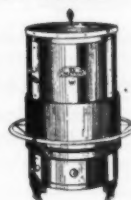
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Entirely different in design and function from any other on the market. New principle of complete combustion increases efficiency, reduces heating cost. Automatic . . . trouble free . . . economical to buy and operate. Holds even temperature for twelve hours.



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trees for every location.

\$1.50 UP  
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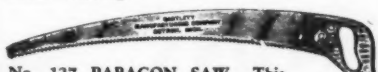
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No. 124B—24" Special Utility Saw combines for the first time: Quick cutting, Smooth cutting, Easy operation. Now available.

### PROPER PRUNING WILL PROTECT YOUR TREES

Damage by ice and wind often can be avoided, or the effects lessened, by use of correctly designed pruning tools, bracing materials, and tree wound dressing.



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This Drop Forged Tool Steel nine inch Hand Pruner has a crucible steel blade and hardened hook. Unsurpassed. Ask for catalog showing a complete line of pruning tools, shears, saws, scrapers, etc.



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CHEMICAL COMPANY**  
SUMTER, SOUTH CAROLINA

There are the mice. If you have a cat, take it. The young couple on Twin Peaks had the first cat we ever saw wearing a harness. Its name was Boots, and it had traveled with them from Michigan. June and Mervin Fish claimed it had never eaten mice before, and although it still turned its nose up at partaking of the creatures, it lined them up dead before the door each morning as a gift offering.

We were not as fortunate as the Fishes. We did not even have mouse traps, and poisoned wheat would never do, for Katie would eat it. At night, in the moonlight, the Kangaroo mice, so called because their hind legs are longer than their front ones, would climb our glass windows by our beds. They were in the house, if you allowed a window to remain open. But screens remedied that problem. There is the season when flying ants swarm about your abode in clouds, and you dread stepping out of the door.

Then there is the nervous tension you are under watching for fires and reporting them. You must have other things on your mind also to keep you occupied and interested beside the fires, because too much concentration on that one theme alone can drive you to distraction.

Butch and I went prepared to combat the monotony of a solitary existence. We bought a leather hand tooling set and took with us several goat hides. (No wonder our own goat

looked suspiciously at us now and then.) We turned out some commendable wallets and purses during our sojourn on the peak. I finished my first novel, and Butch gave a sigh of relief, for I was constantly making him live the part of the hero or villain. Then we had our cameras, and plenty of wildlife to photograph.

There are some moments of anxiety you can't combat, but simply have to see through. When Butch went out to fight a fire, and I was alone, prayer was consolation. With lightning striking all around, our thoughts were on the safety of one another. Butch did not arrive at one fire to which he had started, and when the fighters reported him missing, I became frantic, thinking he had been struck by lightning. That was when I needed and appreciated the comforting calls of the other lookout wives.

Meanwhile a fire had broken out in the Salmon area within my range of vision, and while I was reporting it, Butch came blithely home, never realizing he was about to be the object of a man hunt. He had gone to another fire, when lightning hit a tree a few hundred yards from him and started a blaze. Knowing men were going to the one he had started for, he felt the logical thing to do was to start on the one at hand and put it out before it got beyond control.

In the course of the season, nearly every lookout has a good joke to tell on himself. Don Owen's strikes me as being the strangest. He saw a fire in the night, and two men were sent to investigate. It turned out to be an old sheep herder high on a mountain who had only two candles burning in his tent.

In the United States, there are 3200 lookouts. Surely there is one for you this coming summer if you like the outdoor life. The advantages and disadvantages have been presented. If you need the society of others, if you cannot forsake dancing or the movies or that bowling alley, a lookout job is not for you.

But if, on the other hand, you are artistically inclined, and want the inspiration of the peaks, if you can stand solitude, if your mate is companion enough for you, and if you desire a magnificent honeymoon, then take a lookout. Your first little house of glass will be one you will never forget.

Are we going back? You bet we are!



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For a vacation filled with fun, bring the family to this hospitable inn high in the scenic Alleghenies. Enjoy happy days on rolling fairways. Ride or hike over inviting pine-scented paths. Play tennis on championship courts—or, if you prefer, loiter in sunny contentment on wide lawns or beaches that rim the lovely Lake of Eagles.

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**The CRESTMONT INN, Eagles Mere, Pa.**  
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**Midge Tractor**—an attachment which converts any hand mower to a power mower simply by replacing the present mower handle. LeJay Manufacturing Company, 2912 South Emerson Avenue, Minneapolis 8, Minnesota.

**Magic Binocular**—a full six-power prism binocular, with coated optics, individual eye focusing etc., which weighs only four ounces and adjusts to all eye widths. United Products Company, 7941 South Halsted Street, Chicago 20, Illinois.

**Punch Press**—24-inch throat "Model 18B" designed to handle sheet material up to 48 inches wide. Rotary turret permits operator to locate any one of 18 desired punch sizes quickly—it rotates to desired punch size, locks into position automatically. The press operates efficiently on cardboard, fiberboard, plastic or sheet iron up to 10 gauge thickness. Rotex Punch Company, 4726 East 12th Street, Oakland, California.

**Post Straightener**—powered by a 10,000-pound direct-action hydraulic jack with full-swiveling handle, it straightens metal fenceposts, signposts and similar installations. Complete with an assortment of attachments and chains, the unit operates in all positions and can be ready for use within a few minutes. H. K. Porter, Inc., Somerville, Massachusetts.

**Roto-Beater**—rotary flailing machine with option of steel hammers for stalks and hard crop disintegration or soft rubber beaters for topping vegetable crops. It cleans up trashy field conditions, ends vine and weed tangle to speed harvesting, breaks up cover crops as well as growth in orchards and pastures. Olson Manufacturing Company, Boise, Idaho.

## TREES IN THE BIBLE

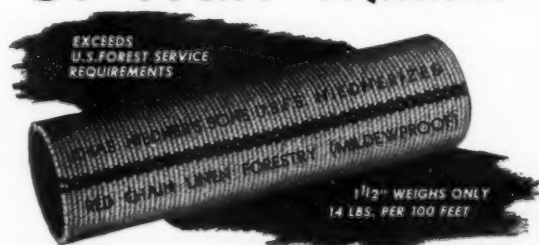
are considered to be important both NATURALLY and SYMBOLICALLY hence they are included among hundreds of items of authentic information in the **ENCYCLOPEDIA DICTIONARY OF THE HOLY BIBLE**, which has just been compiled by **HORACE CARROLL JENKINS** a Life Member of The American Forestry Association and author of its **ALMA MATER SONG**.

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**Conservationists everywhere** are being invited to nominate candidates worthy of receiving AFA's Conservation Awards for 1951. Chairman Robert N. Hoskins has issued specific instructions to supplement a previous general announcement and has declared that nominations will remain open until July 15, after which date he and his committee will begin weighing the merits of respective candidates.

The awards, to be presented during AFA's annual meeting in September, annually recognize and acclaim those individuals who have performed outstanding service in the conservation of American resources of soil, water, forests and wildlife. Candidates are particularly sought in the fields of news, public service, industry, radio and education.

Individuals or organizations wish-

ing to make nominations should send them to The American Forestry Association, Attention: Awards Committee, 919 Seventeenth Street, N.W., Washington 6, D. C. Nominations should include information as to the candidate's achievements, testimonials, press clippings, endorsements and seconds to the nomination. They should be confined to not more than 500 words. A 5x7-inch glossy photograph of the nominee should also be enclosed when feasible.

**Establishment of** these highly prized awards stemmed from AFA's tendering a beautifully inscribed walnut plaque and honorary life membership in 1948 to Arthur Capper, then senator from Kansas, in recognition of his legislative contributions to conservation. In 1949 the awards took their present form and significance. Among those since honored

with plaques and life memberships have been Hugh Hammond Bennett, chief of the Soil Conservation Service; Walter R. Humphrey, Fort Worth, Texas editor; J. N. (Ding) Darling, conservation cartoonist; Charles F. Evans, recently retired from the U. S. Forest Service; and Colonel William B. Greeley who has made his mark in both federal and industrial forestry. There have been ten in all, each as prominent in his field as those mentioned.

Besides Chairman Hoskins, the Conservation Awards Committee includes U. S. Representative Watkins M. Abbitt of Virginia; Milton M. Bryan of the U. S. Forest Service; Dr. M. D. Mobley, executive secretary of the American Vocational Association (himself winner of an award in 1949); Fred Morrell, Washington representative of the American Paper and Pulp Association; and E. A. Norton, assistant to the chief, U. S. Soil Conservation Service.

**The Association's** Board of Directors, meeting in New York City February 23, gave the signal to formulate plans for AFA's 70th annual meeting in the Conway Region of New Hampshire's White Mountains. Tentative plans call for a joint meeting sometime during September with the Society for the Protection of New Hampshire Forests, an extremely active organization celebrating its 50th anniversary this year. Director James J. Storrow of Boston, Massachusetts is busy shaping up a commit-

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### BOARD OF DIRECTORS

**W. J. Damtoft, 1952**—North Carolina, Southern Pulpwood Conservation Association.

**Samuel T. Dana, 1953**—Michigan, School of Natural Resources, University of Michigan.

**Karl T. Frederick, 1952**—New York, New York State Conservation Council.

**William B. Greeley, 1951**—Washington, West Coast Lumbermen's Association.

**Don P. Johnston, 1952**—North Carolina, North Carolina Forestry Association.

**Kent Leavitt, 1951**—New York, National Association of Soil Conservation Districts.

**George W. Merck, 1953**—New Jersey, President, Vermont Forest and Farmland Foundation, Inc.

**Walter H. Meyer, 1951**—Connecticut, Yale School of Forestry.

**Randolph G. Pack, 1952**—New York, Charles Lathrop Pack Forestry Foundation.

**Lloyd E. Partain, 1951**—Pennsylvania, The Curtis Publishing Company.

**A. C. Spurr, 1951**—West Virginia, President, Monongahela Power Company.

**Edward P. Stamm, 1953**—Oregon, Logging Manager, Crown Zellerbach Corporation.

**James J. Storrow, 1952**—New Hampshire, Society for the Protection of New Hampshire Forests.

**Vertrees Young, 1951**—Louisiana, Executive Vice-President, Gaylord Container Corporation.

tee on arrangements and is working closely with members of the New Hampshire Society. We will have further details to report next month.

Other action taken at the February Board meeting included approval of a number of changes in the Association's By-Laws. These changes will be printed in the May issue of *American Forests*.

**Dr. Irvine T. Haig**, whose work as director of the Southeastern Forest Experiment Station in Asheville, North Carolina has received unqualified endorsement by AFA members, has left the Forest Service to join the Food and Agriculture Organization of the United Nations with headquarters in Rome. He will be in charge of research and technology for the Division of Forestry and Forest Products of FAO. Dr. Haig concluded his duties at Asheville March 19. A native Philadelphian, he had an introduction to world forestry when he headed a mission in 1943-44 that surveyed the forest resources of Chile and recommended a program for the development of Chilean forests and industries.

Succeeding Dr. Haig at the Asheville Experiment Station will be Ellwood L. Demmon, who has been director of the Lake States Forest Experiment Station in St. Paul, Minnesota. Murlyn B. Dickerman of Missoula, Montana, chief of the Division of Forest Economics of the Northern Rocky Mountain Forest Experiment Station, will take over the vacated Lake States post.

A third three-day weekend exploratory horseback trip in the vicinity of Lookout Mountain, Chattanooga, Tennessee has been scheduled for May 18, 19 20, according to Dorothy Dixon, AFA's director of Trail Riders. She reports the April 20-22 and May 11-13 trips have already been filled to capacity of 12 each, so a third has been arranged to care for 12 more. If demand persists, there is a possibility of other trips in the fall. Interested members should write Dorothy Dixon at AFA at once.

The 1951 Trail Rider folders are also available upon request.

Word has been received that Professor Harold S. Newins, founder of the University of Florida's School

of Forestry and a long-time friend of the AFA, will retire on June 15 after 16 years as director of the school and member of the faculty. He founded the School of Forestry within the University's College of Agriculture in 1937 and later instigated and helped found the 2000-acre Austin Cary Memorial Forest near Gainesville as a field work laboratory for students in tree growth, thinning, logging and lumbering.

Professor Newins is also director of the University's State Forest Ranger School at Lake City and has been active in beautification projects of Florida cities in conjunction with the Florida Shade Tree Conference. Professor Newins will be succeeded by C. M. Kaufman, professor of forestry at North Carolina State College.

**AFA member** Walter J. Quick, Jr. has recently been named administrator of the forestry program for Greece under the ECA. Previously with the Italian Ministry of Agriculture as a reforestation officer, he formerly was assistant state forester in Maryland and during World War II served with the War Production Board's Lumber Division.

**New Life Members:** Mrs. Robert Hare Davis of Pennsylvania, Mrs. H. T. Dobbins of California, Helen J. Becker of Illinois, Karl G. Timmerman of New York, Dr. Eric Lindroth of California and Mrs. Chauncey McCormick of Illinois.

S.L.F.

#### AFA MEMBERSHIP

Any person, organization, or company may become a member of The American Forestry Association upon application. There are five classes of Membership:

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**Folke Becker** — Wisconsin, President, Trees for Tomorrow, Inc.

**Raymond J. Brown**—New York, Editor, *Outdoor Life*.

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**Mrs. E. E. Byerrum**—Illinois, Chairman, Conservation Committee, General Federation of Women's Clubs.

**R. A. Colgan, Jr.**—District of Columbia, Executive Vice-President, National Lumber Manufacturers Association.

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**L. A. Danse**—Michigan, Member, President's Water Pollution Control Advisory Board.

**J. N. Darling**—Iowa, Conservation Cartoonist.

**Walter E. Disney**—California, President, Walt Disney Productions, Limited.

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**Charles F. Evans**—Georgia, President, Society of American Foresters.

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**Lee Muck** — District of Columbia, Department of the Interior.

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# Editorial

## EULOGY TO A DEPARTED PIONEER

The dwindling ranks of America's forestry pioneers lost a leader March 7 with the death of Henry Solon Graves. A truly great champion of forestry education, Dean Graves was buried with simple and impressive ceremony almost in the shadow of Yale University where he helped found this country's oldest continuing school of forestry.

It is perhaps the Yale School of Forestry which stands as his greatest single monument of achievement. But in a full life span which would have reached 80 years next May 3 the name of Henry S. Graves was in successive years familiar to foresters everywhere for other almost equally important accomplishments. He was chief forester of the United States (1910-1920); a colonel in charge of woods operations for the largest forestry regiment of World War I; a charter member and past president of the Society of American Foresters; and twice president of The American Forestry Association (1923-24 and 1935-36).

Born in Marietta, Ohio in 1871, he was graduated from Yale in 1892, and after brief study at Harvard went to Munich, Germany where he earned the distinction of being the second native American — following Gifford Pinchot — to become professionally educated as a forester. In 1898, Pinchot selected Mr. Graves as his assistant chief in the Division of Forestry of the U. S. Department of Agriculture. It was during this association that both felt keenly the need for qualified foresters, and both being Yale graduates, turned toward their alma mater as a logical site for a graduate school of forestry. With the Pinchot family supplying the necessary endowment, Mr. Graves was appointed the first director.

Thus was launched in 1900 a career which was to stamp Dean Graves as forestry's foremost educator. On his retirement to emeritus status in 1939, Yale's President Seymour said in part, "To no single man is the Yale of today more deeply indebted. He imparted as an operating principle his own ideal of study and research as preparation for public service."

His duties as dean and eminent teacher of such courses as Forest Policy and Economics were interrupted in 1910 by the call to become chief forester for the U. S. Forest Service, but by 1920 he was back on the campus. From 1923 to 1927 he also served as provost of the University, being largely responsible for setting up a central educational administration which coordinated all parts of Yale's vast educational system. In this capacity he fostered a sense of initiation and responsibility among those with whom he was associated.



Henry S. Graves

Even further, Dean Graves exercised a marked influence on the high standards by which professional education in forestry was developed in other American universities and colleges, and certainly he is in a measure responsible for the high place forestry has earned for itself among the older recognized professions. He was the author of numerous periodical articles, bulletins and books on the technical phases of his profession and on education.

His tenure as chief forester, following, as it did, Pinchot's pioneer spadework in federal forestry administration, came at a period when he was called upon to exert supreme effort to preserve the policies of national forest administration in which he and his predecessor concurred. He was equal to the test.

Most recent of many honors bestowed upon Dean Graves was the premier presentation in absentia, of the newly created Gifford Pinchot Medal last December 15 during the Golden Anniversary meeting of the Society of American Foresters. It seemed especially appropriate and fitting that this final public tribute was awarded in the name of such an illustrious senior forestry pioneer and co-worker.

In 1944, Dean Graves was singled out as recipient of the Sir William Schlich Memorial Medal, regarded as American forestry's highest honor and awarded previously only to President Franklin D. Roosevelt and to Pinchot. As early as 1918 he was elected an honorary member of the Royal Scottish Arboricultural Society of Edinburgh, Scotland in recognition of his eminent services to forestry.

To Henry Solon Graves the generations to come owe a debt of gratitude they can never repay.



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